

**ACTUARIAL ANALYSIS OF  
UNPAID CLAIMS LIABILITIES  
AND RESERVES AS OF  
JUNE 30, 2015 OF THE  
MARICOPA COUNTY  
SELF-FUNDED EMPLOYEE  
BENEFITS PROGRAM  
MARICOPA COUNTY  
OCTOBER 14, 2015**

Government Human Services Consulting

## CONTENTS

1. Executive Summary .....	1
• Calculation of Net Amount of Available Assets in Excess of Plan's Liability Requirements and Reserve Needs .....	3
2. Unpaid Claim Liabilities as of June 30, 2015 .....	4
• Incurred but Not Reported/Received but Unpaid Claims .....	4
• Claims Due and Unpaid .....	5
3. Liabilities and Reserves for Short-term Disability Benefits as of June 30, 2015 .....	7
4. Reserve for Unpaid Claims Adjudication Administrative Expense .....	9
5. Stop Loss Insurance and Reserve for Large Claims .....	10
6. Reserve for Excess COBRA Expense .....	12
7. Reserve for Adverse Claim Fluctuation .....	13
8. Premium Deficiency Reserve .....	14
9. Reserve for Performance Incentives .....	16
10. Actuarial Certification .....	17
Appendix A: Details on the Unpaid Claim Liability .....	18
Appendix B: IBNR/RBUC Estimates .....	19
Appendix C: Development of Reserve for Self-Insurance .....	20
Appendix D: Five Year Historical Data .....	21

## 1

## Executive Summary

Mercer Government Human Services Consulting (Mercer) has been retained by Maricopa County (County) to value the self-funded unpaid claims liabilities and claims reserves, as of June 30, 2015, of the County's employee benefits plan (Plan). The self-funded employee benefits plan provides medical, prescription drug, dental, vision, behavioral health, and short-term disability (STD) coverage for approximately 11,600 employees. For these coverages, the unpaid claims liability and claims reserve represent costs that are already incurred by means of health care services that have already been provided or disablements that have already occurred, but for which the Plan has not yet paid.

In addition to the analysis of the unpaid claims liabilities and claims reserves, the County has requested that Mercer review the potential self-insured risks beyond the unpaid claims liabilities and estimate reasonable reserves (if needed) for those risks. These include a reserve to cover the liability for unpaid claims adjustment administrative expense, a reserve for large claims, a reserve for excess Consolidated Omnibus Budget Reconciliation Act (COBRA) expense, a reserve for claim fluctuation, a premium deficiency reserve, and a reserve for performance incentives.

The reserve for claim fluctuation, based on a risk-based capital approach, was included to maintain reasonable solvency levels, taking into account specific information related to the County's types of coverage offered, claim levels, funding sources, and the Plans' provider contracts. There is no requirement to have such a reserve, so holding this reserve is a County management decision. This is discussed in greater detail in Section 7.

In March of 2010, comprehensive health care reform legislation was enacted under the Patient Protection and Affordable Care Act (HR 3590) and the Health Care Education and Affordability Reconciliation Act (HR 4872), known collectively as the Affordable Care Act (ACA). The ACA contains provisions affecting the operation and cost level of the County's health benefit plans. Changes became effective for benefit plan years beginning after September 23, 2010; since the County's benefit plan year follows the July through June fiscal year, the ACA changes began affecting the County's health benefit plans on July 1, 2011. Some clarification, technical corrections, and final regulations have yet to be issued, and some features of the ACA are not yet in effect, so the financial impact of this legislation on fiscal year 2015 (FY15) costs is only a portion of the ultimate cost of the legislation. The report does not address any taxes or fees on the County's health plan, except to the extent that they are manifest in the cost of claims. The non-addressed taxes and fees include the transitional reinsurance fee and the Patient-Centered Outcomes Research Institute fee.

Effective July 1, 2011, the County eliminated its specific stop-loss insurance after having increased its attachment point from \$200,000 to \$750,000. Mercer is recommending the County establish a reserve to provide a means of smoothing the recognition of the costs of large claims over periods of more than one year. See Section 5 of this report for details.

Funding rates in effect for FY16 are not expected to cover costs of benefit and administration for FY16; therefore, premium deficiency reserves are needed as of June 30, 2015.

These are the liabilities and needed reserves for the self-funded benefits plans as of June 30, 2015. Reserve estimates calculated at a later date, with more information or calculated for other purposes, may differ from the values presented here. This report uses calculations with claims data paid through July 2015 for all services.

Coverage		Liabilities and Reserves as of June 30, 2015
1.	Liability for medical claims	\$ 12,264,638
2.	Liability for prescription drug claims	\$ 9,403
3.	Liability for dental claims	\$ 654,002
4.	Liability for vision claims	\$ 167,817
5.	Liability for behavioral health claims	\$ 128,297
6.	Liability and reserve for STD benefits	\$ 463,942
7.	Subtotal for 1+2+3+4+5+6	\$ 13,688,099
8.	Liability for unpaid claims adjustment administrative expense	\$ 0
9.	Reserve for large claims	\$ 2,502,661
10.	Reserve for excess COBRA expense beyond the premiums for those enrolled in COBRA as of July 1, 2015	\$ 234,891
11.	Reserve for claims fluctuation (100% of net underwriting risk component of the risk-based capital formula for other than STD, 250% for STD), based on claims incurred July 2014–June 2015	\$ 12,194,540
12 A.	Premium deficiency reserve for medical, pharmacy, dental, vision, and behavioral health	\$ 839,748
12 B.	Premium deficiency reserve for STD	\$ 0
13 A.	Liability for earned but unpaid performance incentives	\$ 0
13 B.	Reserve for maximum potential performance incentives	\$ 0
14.	Total for 7+8+9+10+11+12A+12B+13A+13B	\$ 29,459,939

As of June 30, 2015 there were approximately \$35.8 million in total assets available to cover the Plan's liability requirements and reserve needs, \$2.2 million of which was for STD, an employee-pay-all program, and \$4.8 million of which was for wellness. This \$35.8 million amount includes restricted assets and fully covers the liabilities for unpaid claims and unpaid claims adjustment administrative expense, and the reserves for the excess COBRA expense, claims fluctuation, premium deficiency reserves, and performance incentives.



### Calculation of Net Amount of Available Assets in Excess of Plan's Liability Requirements and Reserve Needs

	Measurements as of June 30, 2015	STD <sup>1</sup>	Wellness	All Other	Total
1.	Available assets	\$ 2,227,717	\$ 4,790,865	\$ 28,796,256	\$ 35,814,839
2.	Accrued liabilities (includes claims due and unpaid, consumer choice rollover balance; excludes incurred but not reported claims and reported but unpaid claims)	\$ 13,574	\$ 52,020	\$ 4,454,325	\$ 4,519,919
3.	Other current liabilities	\$ 0	\$ 0	\$ 0	\$ 0
4.	Net amount of assets available to cover Plan's liability requirements and reserve needs (1-2-3)	\$ 2,214,143	\$ 4,738,846	\$ 24,341,931	\$ 31,294,920
5.	Unpaid claims liabilities and reserves, including reserve for claim fluctuation of 100% (250% for STD) of the net underwriting risk component of risk-based capital (RBC) and premium deficiency reserves	\$ 761,966	\$ 0	\$ 28,697,973	\$ 29,459,939
6.	Net amount of assets, in excess of reserves, available to cover Plan's liability requirements and reserve needs (4-5)	\$ 1,452,177	\$ 4,738,846	\$ (4,356,042)	\$ 1,834,981

<sup>1</sup> STD is shown separately because it is an employee-pay-all program. The STD benefit assets are the result of past employee contributions exceeding the expenses of the STD benefit plan.

The \$24.3 million the County is holding in net assets available as of June 30, 2015 is not sufficient to cover the recommended Plan reserve of \$28.7 million excluding STD and Wellness at June 30, 2015. However, with no legal requirement to separate Wellness from All Other, the combination of the two has \$29.1 million in net assets as of June 30, 2015, which is sufficient to cover the recommended plan reserve by \$0.4 million.

## 2

### Unpaid Claim Liabilities as of June 30, 2015 Incurred but Not Reported/Received but Unpaid Claims

The County employee benefit plan incurs a liability when a covered employee or dependent receives medical, prescription drug, dental, vision, or behavioral health care that is covered under the terms of the Plan. Actual payment from the trust fund to the provider or to the employee may occur within a few weeks or as much as 12 or more months later. The unpaid claim liability as of the end of an accounting period is essential to accurate measurement of the Plan's financial position. The unpaid claim liability can be divided into these two components:

- |      |  |
|------|--|
| RBUC | Received but unpaid claims — those claims already received by the claim administrator that are unpaid as of the measurement date. These claims are also commonly called claims reported in process of adjustment or claims in course of settlement, since the administrator may be requesting additional information needed to adjudicate the claim. Also, the administrator will likely keep several days' worth of claims available so that processing can proceed uninterrupted through fluctuations in the volume of claim receipts. |
| IBNR | Incurred but not reported claims — those claims that have not yet been received by the claim administrator as of the measurement date. This is the delay from the date of service until the claim administrator receives the claim form. The term "IBNR" is often used to refer to the entire incurred but unpaid claim liability. Strictly speaking, however, "IBNR" is only the unreported portion of the unpaid claims.   |

For medical, prescription drug, dental, vision, and behavioral health coverages, the typical actuarial approach to estimating the unpaid claim liability (both the RBUC and IBNR combined) begins with separating each month's paid claim data by month of incurral (the month in which the service was provided). The lag pattern of claim payments — portions paid in the month of incurral, one month after incurral, two months after incurral, and so on — is then used to develop a projection of future payments that will be made on claims that have already been incurred.

The County and its vendors supplied Mercer with reports that divided paid claims by month incurred from August 2010 through July 2015. Separate reports were provided for medical, prescription drug, dental, vision, and behavioral health claims. Although Mercer did not audit the data, Mercer performed high-level comparisons of data provided by the County.

Mercer calculated the unpaid claim estimates from claim data paid through July 31, 2015. For medical, prescription drugs, dental, and vision claims incurred through June 2015, the paid run out through July 2015 is sufficient, so that the estimates of claims incurred are based on claims paid and an assumed completion percentage based on past completion patterns.

For behavioral health claims incurred in all but the month of June 2015, sufficient claims have been paid so that the estimates of incurred claims are based on claims paid and an assumed

completion percentage based on past completion patterns. For the June 2015 incurred month, a lesser portion of the claims have been paid through July 2015, so the initial incurred claim estimates that are produced by the development method may vary considerably from reasonable expectations. Therefore, the estimate of incurred claims for this month is based on an expected value based on prior months' costs trended forward.

The County holds a separate reserve for adverse claim fluctuation, so Mercer is not recommending any additional margin for adverse deviation be added to the estimate of the liability for incurred but not paid claims.

### **Claims Due and Unpaid**

Claims due and unpaid refers to the claim liability for amounts, if any, shown in the claim lag reports as "paid", but for which the County has not, due to timing, actually paid as of the valuation date. This is normal and routine but can be significant. It could be recognized as an account payable, if the exact amount is known.

The County's benefit payments to the vendors are made daily, weekly, semi-monthly, or monthly. Therefore, the last benefit payment of the month will usually not coincide with the valuation date. For June 2015, the final benefit payments were made at varying points of time depending on the vendor. The following was provided by the County regarding the administration of these claims during the August 1, 2010 through June 30, 2015 time span:

- Medical claims for the HMO plan, as well as medical claims in the OAP and CFHSA plans incurred prior to Jul 1, 2014, are paid by CIGNA. Claims are reimbursed by the County via a daily bank account payment.
- Medical claims for the PPO and HDHP plans are paid by United Healthcare for services incurred July 1, 2014 and later. Claims are reimbursed by the County via a daily bank account payment.
- Prescription drug claims are paid by the pharmacy benefits manager, Catamaran. Effective July 2010, prescription drug invoices have been received semi-monthly by the County, dated the sixteenth of the month and the first of the following month. Catamaran was acquired by OptumRx on July 23, 2015. Because this acquisition was completed after June 30, 2015, the report refers to Catamaran as the County's pharmacy benefits manager.
- Dental claims are paid by CIGNA. Claims are reimbursed by the County via a bank account payment.
- Vision claims are paid by Avesis for services incurred July 1, 2013 and later. For vision services incurred prior to July 1, 2013, EyeMed Vision Care paid vision claims. Claims are reimbursed by the County semi-monthly via an ACH wire.
- Behavioral health claims are paid by Magellan Health Services. Claims are reimbursed by the County via a weekly ACH wire.

The County has confirmed which amounts shown as paid by the vendor as of June 30, 2015 were actually not paid by the County as of the close of accounting for the period ending June 30, 2015. The County is aware that this is an outstanding liability for the benefit plan and

has established an accounting liability to recognize it. Therefore, these adjudicated but unpaid claims are not included in Mercer's estimate of total claims IBNP as of June 30, 2015.

Below is a summary of the estimated unpaid claim liability. In addition to being expressed in dollars, the IBNR/RBUC liabilities are also expressed in months' worth of claims based on the average monthly incurred claims for the most recent three months. The majority of claims unpaid at any point in time are from the most recent three months. This measure of claims adjudication time is independent of medical inflation and changes in enrollment. Details on the unpaid claim liability are in Appendix A.

### **Claims Incurred but Unpaid as of June 30, 2015**

<b>Coverage</b>	<b>IBNR/RBUC</b>	<b>IBNR/RBUC as Months of Incurred Claims</b>
1. Liability for medical claims	\$ 12,264,638	1.22
2. Liability for prescription drug claims	\$ 9,403	0.01
3. Liability for dental claims	\$ 654,002	1.83
4. Liability for vision claims	\$ 167,817	1.37
5. Liability for behavioral health claims	\$ 128,297	1.69
6. Subtotal for 1+2+3+4+5	\$ 13,224,157	1.07

Note that liabilities and reserves for the STD benefit are covered separately in Section 3. Also, the liability for unpaid claim adjustment administrative expense is covered separately in Section 4.



# 3

## Liabilities and Reserves for Short-term Disability Benefits as of June 30, 2015

The County STD plan provides benefits up through the twenty-sixth week following the disability date. Benefits commence on the first day of inpatient hospitalization or after a two-week elimination period for which zero benefits are paid. Prior to July 1, 2013, the elimination period was three weeks. The cost for the STD benefit plan is paid entirely by the employees; there is no employer contribution. Benefits are 40%, 50%, or 60% of regular earnings, up to a maximum benefit of \$2,000 per week. The County reports claims to Sedgwick Claims Management Services, Inc., its claims processor. Under typical circumstances, it takes four weeks or more from the date of disability (the date of injury or illness that is the incurral date) before approval is given to begin claims payments. The program's liabilities — benefits that the Plan owes but has not paid as of the valuation date — include the following:

**IBNR:** The accrued benefits for which the claims processor has not yet received the initial notification as of the valuation date.

**RBUC:** The accrued benefits for claims for which the claims processor has received the initial notification as of the valuation date, but approval for making the first payment has yet to be made as of the valuation date.

**Due and unpaid claims:** The accrued benefits for claims that are processed, but actual payment has not been made. Benefit payments for the STD plan are made weekly, typically on the Thursday of that week. For June 2015, which ended on Tuesday, June 30, Mercer assumes that the payment for Thursday, June 25, was made as of June 30, 2015.

The STD plan also results in the need to establish reserves to cover benefits that the Plan does not yet owe as of the valuation date.

**Present value of amounts not yet due on claims:** Amounts to be paid for periods of disability that extend beyond the valuation date on claims already incurred, as of the valuation date. For example, for a claimant who has been disabled for 12 weeks as of the valuation date, this is the calculation of the value of the remaining potential 14 weeks of benefit payments. Many claimants will recover and return to work before the benefit expires, so the value of the reserve for this claimant would be less than 14 weeks' worth of benefits. The term "present value" refers to the allowed use of interest discounts to account for the time value of money between the valuation date and the payment date. Because the time difference is brief on this short-term benefit, no interest discount is taken. However, for long-term disability benefits in which benefits can extend for as much as 40 years following the date of disability, interest discounts are used universally.

Sedgwick provided person-by-person data on STD claimants, including weekly benefit amounts, disablement dates, and benefits paid through dates. Mercer used this to construct a claim lag table to show, for each month of disablements, the development of claim payments by month of payment. This was used to estimate the total of the incurred but unpaid claim liability, plus the

reserve for the present value of amounts not yet due. Sedgwick also provided its STD claims metrics reports summarized in the table below:

	July 2012– June 2013	July 2013– June 2014	July 2014– June 2015 <sup>1</sup>
Average work days from disability date to claim notification	8.6 days	10.6 days	9.6 days estimated
Average work days from disability date to payment decision	22.8 days	23.8 days	23.3 days estimated
Average claim duration	11.8 weeks	11.6 weeks	
Median claim duration	8.6 weeks	8.6 weeks	
Average monthly new STD claims approved	35.3 claims	45.9 claims	43.4 claims
Average monthly STD claims closed for maximum duration	5.5 claims	6.7 claims	
Average monthly STD benefit dollars paid	\$ 149,542	\$ 214,094	\$ 198,247

Note: The average days from disability date to claim notification and the average days from disability date to payment decision for FY15 were not available, so the figures shown above for July 2014–June 2015 are estimates based on the average of the prior two fiscal years.

Mercer used the data on the average work days from disability date to claim notification and to payment decision to allocate the total among the following components: IBNR, RBUC, due and unpaid, and the present value of amounts not yet due.

The chart below lists the liability and reserve components for the STD benefit plan as of June 30, 2015. In addition to dollars, results are expressed in percent of annual claims, months of claims, and weeks of claims.

	Dollars	Percent of Annual Claims	Months of Claims	Weeks of Claims
IBNR claims	\$ 62,880	2.6%	0.32	1.37
RBUC	\$ 89,735	3.8%	0.45	1.96
Due and unpaid claims (June 30, 2015)	\$ 18,340	0.8%	0.09	0.40
Present value of amounts not yet due	\$ 292,987	12.3%	1.47	6.39
Total STD claim liability and reserve	\$ 463,942	19.5%	2.34	10.12
Total STD claim liability and reserve, excluding due and unpaid	\$ 445,602			

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## Reserve for Unpaid Claims Adjudication Administrative Expense

A separate liability for unpaid claims adjudication administrative expense is calculated. In the event that the self-funded plan is terminated and replaced by a fully insured plan, the Plan could incur a cost for claim administration on the run-out claims, or the Plan could incur a cost for other early termination fees. These fees could vary by coverage.

The County provided contracts for each vendor. Mercer reviewed each current vendor contract for administrative charges related to early termination. The County's current vendor contracts do not have any additional expense for adjudication of claims run out if the contracts were to be terminated. The administrative expenses to provide for adjudication of claims IBNP, as of the valuation date, are covered by the administrative charges already paid to the vendors. However, Mercer recommends that future vendor contracts be monitored for any changes.

Early termination fees related to the onsite pharmacy are no longer applicable. The Take Care Health Center is an onsite pharmacy and clinic operated by Catamaran. Given the onsite pharmacy and clinic were not terminated by the County before the expiration of the original contract, no early termination fees were applicable. Therefore, the reserve is estimated to be \$0 as of the valuation date of June 30, 2015.



# 5

## Stop Loss Insurance and Reserve for Large Claims

The County self-funded medical plan purchased specific stop-loss coverage, with an attachment level of \$750,000, effective July 1, 2010. Prior to that, the attachment point was \$200,000. The coverage was on a claims paid basis over the benefit plan year, the 12 months ending June 30. Effective July 1, 2011, the County discontinued its purchase of individual specific stop-loss insurance.

In addition to the risk of large individual claims, the Plan also has the risk that claims in the aggregate will be higher than the amount supported by the funding rates. Although aggregate stop-loss coverage is available for purchase, such protection is typically sold to smaller benefit plans at the 120% or 125% of expected claims level, with 100% of expected being conservatively estimated by the stop-loss insurer. The County does not purchase aggregate stop-loss insurance; Mercer supports this policy. The stability that comes from a program the size of the County's, and the support from the County's reserve for adverse deviation, provide sufficient protection for the aggregate claim risk.

Because of the discontinuance of the purchase of specific stop-loss insurance, the County may wish to consider the establishment of a large claim risk reserve. This would be an allocated amount to smooth the financial effect of the incidence of large claims. A large claim risk reserve fund could be constructed to spread the financial impact across all months of the plan year, as well as across several plan years.

For example, the County could establish a large claims reserve that is based on a portion of the funds not spent on stop-loss premiums, since the County increased the attachment point. The chart below shows the amount of such funds based on the \$750,000 attachment point.

	Based on a \$750,000 Attachment Point
1. Per-employee-per-month (PEPM) expected claim costs	\$ 17.81
2. June 2015 enrollment in annualized employee-months	140,520
3. Initial reserve level = 1 x 2	\$ 2,502,661

The PEPM costs shown in the table above are based on Mercer's model of large claims. They are not a projection of stop-loss premiums, which would include expense and risk margins, in addition to the insurer's projection of claims above the attachment point.

The large claim reserve would start on July 1, 2015, at the initial reserve level shown above, with additions based on the expected claim rate in the first row of the table above and monthly enrollment. The reserve could be allowed to accumulate until it reached an amount that was equal to three years' worth of the PEPM premium rate. The monthly amounts going into the large claim fund would be treated similar to fixed costs, such as stop-loss insurance premiums previously paid to Symetra. Recoveries from the large claim reserve would be treated similar to



stop-loss recoveries. Over the long-term, payments to the large claim reserve fund, and recoveries from it, would be equal, but net payments in any particular year would not be equal.

Mercer has included a recommended large claims reserve based on the \$750,000 attachment point. Establishing a specific reserve to be adjusted by large claims is a policy decision for the County to consider which would provide enhanced protection against the impact of individual large claims over time.

# 6

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## Reserve for Excess COBRA Expense

When former employees elect to continue their benefits under COBRA, they pay 102% of the total premium — the sum of their contribution as an employee plus the County's share. This amount is not expected to cover the costs of the benefits because, on average, those who elect a COBRA extension of benefits have higher than average claims. The COBRA reserve is the expected shortfall of premium compared to expenses for all of those who are on the COBRA extension of benefits as of the valuation date. Since these persons are no longer rendering service as employees, the expected shortfall is recognized at the valuation date rather than over the future (up to 18, 29, or 36) months, depending on the particular circumstance that triggered COBRA eligibility.

Mercer used the average of the County's last six months of COBRA enrollment ending June 2015, COBRA specific premiums for FY16, and actual information provided by the County's COBRA administrator to determine expected average duration on COBRA. Since, at any given time, people may be beginning, continuing, or exiting their COBRA enrollment, Mercer assumed the COBRA population is, on average, halfway through its time on COBRA.

Since COBRA claims data is not tracked separately from that of active employees, average claim and expense levels beyond the COBRA premium received could not be determined for the County's COBRA population specifically. Mercer is not recommending that the County begin collecting data on COBRA expenses separately from the active employee data. Based on industry studies and Mercer experience with other self-funded benefit programs, Mercer assumed the COBRA population experiences claim and expense levels 50% greater than the COBRA premium.

As of June 30, 2015, the reserve for excess COBRA expense is \$234, 891. This reserve is for the expected excess of medical and administrative expense compared to premium for periods beyond the valuation date for those who have elected COBRA coverage as of the valuation date. The IBNR/RBUC and due and unpaid liabilities incurred as of June 30, 2015 for those on COBRA are already included as part of the respective IBNR/RBUC and due and unpaid liabilities.

Excess COBRA expense reserves for future valuation dates will be different from the June 30, 2015 reserve due to changes in the number of employees with COBRA qualifying events, changes in the portion of those who elect COBRA coverage out of those eligible, and changes in the length of time that they continue their COBRA coverage.

# 7

## Reserve for Adverse Claim Fluctuation

The Plan has the risk that claims in the aggregate will be higher than the amount supported by the funding rates. Accordingly, the Plan should have funds available in addition to the funds covering the unpaid claims liabilities to cover the risk of adverse claim fluctuation.

For the June 30, 2015 reserve for adverse claim fluctuation, Mercer recommends the County hold an amount based on the formula for Risk-Based Capital (RBC) requirements for health insuring organizations, as promulgated by the National Association of Insurance Commissioners (NAIC). The NAIC uses a RBC formula to alert regulators of health insurers when the level of free surplus warrants increased regulatory scrutiny. Mercer used the underwriting risk component of the RBC formula, the portion of the formula that covers the volatility of the risk — whether the actual cost will be covered by the accrual rates estimated to cover the cost. As the sponsor of a self-funded health benefit plan, the County faces an underwriting risk similar to that which an insurance company would face. The underwriting risk reserve shown below is for the combination of active and retired employees, as well as those on COBRA continuation of benefits.

In Mercer's opinion, it is appropriate for the County to target 100% of the company action level (CAL) RBC underwriting risk component for the underwriting risk reserve, although there is no requirement that the County hold such a reserve. The County will continue to recognize the reserve for large claims that supports their decision not to purchase individual stop loss insurance. The County will monitor reserve levels. The result of the RBC calculation for health benefits other than STD is \$11,896,516 at the 100% CAL level.

For STD benefits, the County is targeting 250% of the CAL RBC underwriting risk component for the underwriting risk reserve. In Mercer's opinion, this is appropriate for this benefit, which is funded entirely by employee-contributions. The result of the RBC calculation for STD benefits is \$298,024 at the 250% CAL level. Details on the reserve for adverse claim fluctuation are in Appendix C.

For the health benefits other than STD, the 100% CAL RBC reserve is equivalent to 8.8% of paid claims for the 12 months ending June 30, 2015. This amount is similar to the surplus requirement that insurance companies must maintain to avoid extra scrutiny by state insurance departments, which can culminate in supervision by the insurance department and even liquidation in extreme cases. If benefit plan claims are expected to increase from year to year, whether from inflation in costs of services, increases in utilization, or increases in the number of covered persons, then the 100% CAL RBC would be expected also to increase as a dollar amount from year-to-year.

The RBC-based recommended reserve for STD continues to be 250% of CAL, since the employee-pay-all STD plan cannot look to the County to fund any future revenue shortfalls. This reserve amount is 12.5% of claims paid in the 12 months ending June 30, 2015.



# 8

## Premium Deficiency Reserve

A premium deficiency reserve (PDR) is the additional reserve (beyond the IBNR/RBUC and due and unpaid) to be recognized when the expected future incurred benefit and administrative costs exceed the premiums to be collected for the remainder of a contract period. This can include both planned drawdowns of reserve funds and unplanned amounts that result from emerging experience being higher than expected as allowed in the premium rates.

A PDR would need to be established if the future premiums for a rate effective period are expected to be insufficient to cover future claims and expenses. The accrual rates for FY16 for the various coverages were set based on claim data paid through July 2014, so there is a gap of 11 months between the end of the experience period and the beginning of the rate effective period. If the analysis of experience data through July 2015 were to result in estimates of FY16 claims and expenses that exceeded the FY16 premium accrual rates, then a PDR would be used to set apart a portion of plan assets, as of June 30, 2015, to account for the deficiency until new premium accrual rates would go into effect, as of July 1, 2016, that would be expected to cover claims and expenses.

In determining the need for a PDR, Mercer analyzed the STD benefit separately from the other health benefits. STD benefits are and have been funded entirely from employee contributions, so STD benefit fund assets are accounted for separately compared to those for the other health benefits.

The other health benefits are analyzed in the following categories:

- Each medical benefit option
- Pharmacy drugs
- Behavioral health
- Dental benefits
- Vision benefits

Although separate premium accrual rates are determined for each medical benefit option, for prescription drugs, and for behavioral health, the employee elects a package that includes the combination of medical, drug, and behavioral health coverage. The dental and vision coverages have separate premium accrual rates, and employees can elect these coverages with or without medical coverage. However, the vast majority of those employees who elect dental and vision coverage also elect medical benefits. Because of this, and the fact that a substantial portion of the cost of all of these benefits is paid by the County, the PDR calculation combines the effect of all health benefits other than STD. Therefore, if some coverages are expected to have premiums fully cover claims and expenses, then any excess would serve to reduce the PDR from the coverages for which there is a projected deficit.

Typically, a PDR would be established when emerging experience reveals an unintended deficiency of future premiums covering future claims and expenses. Also, if premium accrual



rates were intentionally set to be less than the expected claims and expenses, a planned PDR would be established. The amount of a PDR, whether for an intended or unintended deficiency, would be expected to be amortized over the course of the rate effective period.

For health benefits other than STD, emerging experience is showing that the expected FY16 expenses would exceed premiums by \$839,748. This estimate is based on July 2015 enrollment, known levels of FY16 administrative expense charges, and projected FY16 claims based on experience through July 2015 payments. The claim experience of the medical and pharmacy benefits is driving the calculation. The projected FY16 costs for behavioral health, dental, and vision benefits are each lower than the respective FY16 accrual premiums or, for behavioral health, premium component. The annual trend rates below were used in the development of the PDR.

Medical — CIGNA Medical Group	7.00%
Medical — UHC PPO	6.00%
Medical — UHC HDHP (includes pharmacy, behavioral health)	6.00%
Medical composite	6.44%
Pharmacy	12.50%
Behavioral health	3.50%
Dental	3.50%
Vision	3.50%
STD	0.00%

For STD, the premium rates are factors that vary by the 40%, 50%, or 60% of covered pay benefit level. When pay increases, the STD premiums automatically increase, so the 0% annual trend rate shown in the chart above is not a projection that STD costs will not increase on an absolute dollar basis. For STD benefits, emerging experience is showing that the expected FY16 expenses would not exceed premiums. This estimate is based on July 2015 enrollment, known levels of FY16 administrative expense charges, and projected FY16 claims based on experience through July 2015 payments.

Mercer's understanding is that FY17 premium rates for all benefits will be established to be at the level needed to cover expected FY17 costs, so a separate PDR for FY17 will not need to be established as of June 30, 2015. Although initial work on the premium rates for FY17 is currently in progress, final rates have not been determined. When the rates are finalized, a PDR for FY17 could be established if those rates are expected not to cover the costs in FY17.

The table below summarizes the PDRs to be established as of June 30, 2015:

	PDR for FY16	PDR for FY17 and Future Years	Total PDR
Benefits other than STD	\$ 839,748	\$ 0	\$ 839,748
STD	\$ 0	\$ 0	\$ 0
Total	\$ 839,748	\$ 0	\$ 839,748

# 9

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## Reserve for Performance Incentives

In FY11 and prior, the County provided financial incentives to vendors for reaching specified goals. There are also performance guarantees that only penalize for not reaching targets or are fees at risk. These are not included in the liability for performance incentives, since they do not represent an additional cost to the County. In contrast, performance-based incentives would require the County to make additional payments to its vendors.

The liability for performance incentives can be considered in two ways: the maximum potential incentives and the earned but unpaid incentives. The earned but unpaid incentives would include any targets that have already been measured and are known to have been achieved, but no payment has been made. The County has communicated that it has no such liability. However, for FY11 and prior, the County was liable for potential incentives as described in the contracts with their vendors.

Mercer reviewed the current and historical negotiated vendor contracts provided by the County to determine the maximum potential performance incentives. The majority of the incentives between FY09 through FY10 are associated with CIGNA's medical administration. There are incentives for a range of services, including pharmacy, claim risk, administrative, customer service, and wellness metrics. There are additional incentives for CIGNA's dental program and Walgreens Health Initiatives' pharmacy administration. After reviewing the renegotiated contracts, it was determined that the incentives for FY09 would remain the same for FY10. In FY11, the performance incentives within the CIGNA contracts changed significantly from prior years. CIGNA agreed to contracts that remove any performance incentives. However, the Walgreens Health Initiatives contract continued to include performance incentives for FY11. Mercer recommended that the County consider removing these remaining incentives in future contracts. After reviewing the renegotiated contracts for FY12, it was determined that all contractors agreed to contracts that remove any performance incentives. This has continued with no performance incentives included in the current vendor contracts as of June 30, 2015.

The maximum potential performance incentives could include incentives in the FY11 and prior contracts that have not been reviewed. The County confirmed there are no remaining potential performance incentives from FY11 or prior vendor contracts.

# 10

## Actuarial Certification

Mercer has prepared this report exclusively for Maricopa County; Mercer is not responsible for reliance upon this report by any other party. Subject to this limitation, the County may direct that this report be provided to its auditors in connection with audits of the benefits plan or its sponsoring entities. These calculations were prepared using generally accepted actuarial methods and procedures. In particular, the estimated liability for claims IBNP was prepared in accordance with Actuarial Standard of Practice No. 5: Incurred Health and Disability Claims. The information presented in this report is based on actuarial assumptions and reasonable expectations that represent Mercer's best estimate of anticipated experience under the plans based upon:

- Enrollment and other data provided by Maricopa County.
- Claim payments as reported by CIGNA, United Healthcare, Avesis, Magellan Health Services, Catamaran, and Sedgwick Claims Management Services, Inc.

All estimates are based upon the information available at a point in time and are subject to unforeseen and random events. Therefore, any projection must be interpreted as having a likely range of variability from the estimate. Any estimate or projection may not be used or relied upon by any other party or for any other purpose than for which it was issued by Mercer. Mercer is not responsible for the consequences of any unauthorized use.

Mercer is available to answer any questions on the material contained in this report or to provide explanations or further details, as may be appropriate. The undersigned credentialed actuaries meet the qualification standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. Mercer is not aware of any direct or material indirect financial interest or relationship, including investments or other services, that could create a conflict of interest that would impair the objectivity of our work.

  
F. Kevin Russell, FSA, MAAA

  
Ann Marie Janusek, ASA, MAAA

## APPENDIX A

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### Details on the Unpaid Claim Liability





Maricopa County CIGNA CMG Medical Lag Table and IBNR Development

Lag	Month Incurred												
	Aug 10 - Jun 14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15
0	\$58,742,291	\$1,547,623	\$1,279,432	\$1,229,181	\$1,623,462	\$1,162,691	\$743,559	\$1,107,741	\$1,013,229	\$1,265,566	\$1,544,959	\$1,393,903	\$1,441,335
1	\$77,118,344	\$1,749,480	\$1,568,420	\$2,111,642	\$1,976,241	\$1,666,419	\$2,222,817	\$1,631,089	\$2,197,004	\$2,213,159	\$1,785,220	\$1,619,198	\$1,648,541
2	\$16,557,663	\$449,712	\$450,355	\$267,586	\$231,853	\$401,926	\$278,960	\$772,474	\$274,811	\$415,767	\$279,923	\$274,711	
3	\$6,379,063	\$288,747	\$127,312	\$227,778	\$230,756	\$37,266	\$412,601	\$403,105	\$308,932	\$239,066	\$81,937		
4	\$2,087,569	\$86,249	\$356,875	\$90,335	\$53,246	\$55,133	\$14,503	\$78,035	\$383,871	\$41,656			
5	\$1,450,931	\$33,312	\$78,067	\$196,561	\$13,230	\$6,133	\$28,427	\$18,629	\$85,234				
6	\$818,794	\$19,999	\$10,129	\$8,047	\$53,413	\$53,830	\$12,822	\$7,880					
7	\$311,621	(\$64,138)	\$3,347	\$40,585	(\$1,874)	\$7,637	\$9,790						
8	\$294,153	\$13,773	\$11,583	\$23,605	(\$3,999)	\$1,436							
9	(\$102,942)	(\$1,322)	\$1,231	\$25,542	(\$108)								
10	\$1,275,851	(\$1,330)	\$1,006	\$2,479									
11	\$10,706	(\$1,677)	\$1,316										
12	\$83,881	\$433											
13+	(\$444,551)												
Total Incurred and Paid-to-Date:	\$164,563,372	\$4,120,861	\$3,889,074	\$4,213,440	\$4,176,218	\$3,392,472	\$3,723,508	\$4,018,953	\$4,263,080	\$4,175,214	\$3,672,038	\$3,287,813	\$3,089,876
Estimated Completeness:	100.04%	100.09%	100.07%	100.06%	100.05%	100.01%	99.89%	99.86%	99.48%	98.64%	96.57%	90.99%	81.89%
Estimated Incurred:	\$164,521,000	\$4,117,256	\$3,886,184	\$4,210,840	\$4,174,208	\$3,392,263	\$3,727,442	\$4,024,504	\$4,285,381	\$4,232,587	\$3,802,455	\$3,613,572	\$3,773,300
Estimated IBNR Still Outstanding at 7/31/2015:	(\$62,371)	(\$3,605)	(\$2,891)	(\$2,600)	(\$2,011)	(\$218)	\$3,934	\$5,551	\$22,301	\$57,373	\$130,417	\$325,759	\$683,424
Claims Runout Paid After 6/30/2015:	\$34,613	\$433	\$1,316	\$2,479	(\$108)	\$1,436	\$9,790	\$7,880	\$85,234	\$41,656	\$61,937	\$274,711	\$1,648,541
Estimated Retrospective IBNR at 6/30/2015:	(\$27,759)	(\$3,172)	(\$1,574)	(\$121)	(\$2,119)	\$1,217	\$13,724	\$13,430	\$107,535	\$99,028	\$192,354	\$600,471	\$2,331,964

Source data from CIGNA.  
This lag triangle uses calculations with claims data paid through July 2015.

## Maricopa County UHC PPO Medical Lag Table and IBNR Development

Lag	Aug 10 - Jun 14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15
0	\$0	\$646,820	\$753,533	\$820,230	\$693,433	\$732,159	\$874,402	\$643,806	\$719,061	\$784,468	\$883,125	\$870,365	\$885,940
1	\$0	\$1,229,359	\$1,645,683	\$1,233,495	\$1,373,109	\$1,089,799	\$1,035,021	\$1,360,314	\$1,678,380	\$1,533,692	\$1,967,912	\$1,270,494	\$1,775,777
2	\$0	\$304,881	\$424,636	\$384,229	\$353,539	\$630,064	\$455,198	\$365,836	\$643,644	\$303,425	\$694,032	\$558,617	
3	\$0	\$202,838	\$252,279	\$151,704	\$211,737	\$66,347	\$151,392	\$648,940	\$175,335	\$287,747	\$127,747		
4	\$0	\$43,643	\$61,767	\$99,013	\$71,854	\$24,473	\$278,967	\$160,065	\$25,544	\$81,222			
5	\$0	\$32,843	\$27,462	\$13,015	\$12,722	\$21,194	\$10,979	\$26,458	\$356,446				
6	\$0	\$8,926	\$75,759	\$9,280	\$81,978	\$14,399	\$6,912	\$8,323					
7	\$0	\$3,424	\$43,832	\$8,083	\$3,607	\$30,796	\$1,389						
8	\$0	\$17,692	\$16,960	(\$12,592)	(\$6,469)	\$33,388							
9	\$0	\$48,382	\$20,166	\$28,947	(\$3,230)								
10	\$0	(\$10,450)	(\$9,442)	\$6,092									
11	\$0	\$28,129	\$19,835										
12	\$0	\$4,126											
13+	\$0												
Total Incurred and Paid-to-Date:	Aug 10 - Jun 14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15
Estimated Completeness:	\$0	\$2,560,612	\$3,332,472	\$2,741,496	\$2,792,288	\$2,642,619	\$2,814,261	\$3,213,741	\$3,598,419	\$2,990,555	\$3,672,816	\$2,699,477	\$2,661,716
Estimated Incurred:	0.00%	99.80%	99.64%	98.79%	98.55%	98.09%	97.73%	97.22%	96.23%	94.32%	91.15%	83.62%	68.80%
Estimated IBNR Skill	\$0	\$2,565,744	\$3,344,540	\$2,774,966	\$2,821,921	\$2,694,082	\$2,879,495	\$3,305,563	\$3,739,223	\$3,170,642	\$4,029,585	\$3,228,373	\$3,868,512
Outstanding at 7/31/2015:	\$0	\$5,131	\$12,067	\$33,470	\$29,633	\$51,463	\$65,234	\$91,822	\$140,804	\$180,087	\$356,770	\$528,896	\$1,206,795
Claims Runout Paid After 6/30/2015:	(\$0)	\$4,126	\$19,835	\$6,092	(\$3,230)	\$33,388	\$1,389	\$8,323	\$356,446	\$81,222	\$127,747	\$558,617	\$1,775,777
Estimated Retrospective IBNR at 6/30/2015:	(\$0)	\$9,257	\$31,902	\$39,563	\$26,403	\$84,851	\$86,623	\$100,145	\$497,250	\$261,309	\$484,517	\$1,087,513	\$2,982,572
													\$5,671,905

Source data from UHC.  
This lag triangle uses calculations with claims data paid through July 2015.







Maricopa County CIGNA CFHSA Medical Lag Table and IBNP Development

Lag	Month Incurred													
	Aug 10 - Jun 14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	
0	\$16,404,578	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1	\$19,227,089	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	\$5,528,419	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	\$1,533,484	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	\$1,577,232	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	\$967,624	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	\$328,204	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
7	\$140,555	\$0	\$0	\$0	\$0	\$0	\$0	\$0						
8	\$70,950	\$0	\$0	\$0	\$0	\$0	\$0	\$0						
9	\$38,637	\$0	\$0	\$0	\$0	\$0	\$0							
10	\$72,765	\$0	\$0	\$0	\$0									
11	\$8,867	\$0	\$0											
12	(\$49,865)	\$0												
13+	(\$64,411)													
Total Incurred and Paid-to-Date:	\$45,784,129	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Estimated Completeness:	100.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Estimated Incurred:	\$45,774,343	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Estimated IBNR Still Outstanding at 7/31/2015:	(\$9,786)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Claims Runout Paid After 6/30/2015:	(\$7,649)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Estimated Retrospective IBNR at 6/30/2015:	(\$17,435)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Source data from CIGNA.  
This lag triangle uses calculations with claims data paid through July 2015.







Maricopa County Avesis Vision Lag Table and IBNR Development

Lag	Month Incurred												
	Aug 10 - Jun 14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15
0	\$2,194,227	\$66,040	\$33,776	\$18,494	\$39,178	\$18,006	\$32,844	\$23,388	\$23,825	\$22,391	\$31,933	\$20,607	\$20,550
1	\$2,820,901	\$84,550	\$94,642	\$80,411	\$57,130	\$60,994	\$47,838	\$57,185	\$55,230	\$62,409	\$57,814	\$72,002	\$127,254
2	\$337,949	\$7,000	\$7,079	\$3,046	\$6,002	\$1,565	\$5,272	\$3,804	\$4,200	\$4,091	\$6,427	\$5,773	
3	\$54,744	\$1,936	\$1,738	\$1,046	\$3,689	\$948	\$2,358	\$1,929	\$3,543	\$5,516	\$790		
4	\$18,988	\$805	\$334	\$420	\$268	\$617	\$957	\$849	\$8,497	\$2,160			
5	\$13,273	\$560	\$1,835	\$1,195	\$180	\$1,855	\$130	\$2,690	\$1,495				
6	\$10,868	\$0	\$705	\$110	\$790	\$100	\$1,820	\$125					
7	\$3,464	\$0	\$165	\$0	\$0	\$175	\$150						
8	\$5,789	\$251	\$340	\$195	\$35	\$140							
9	\$5,340	\$0	\$199	\$40	\$0								
10	\$2,129	\$350	\$0	\$335									
11	\$1,579	\$295	\$150										
12	\$3,371	\$330											
13+	\$438												
Total Incurred and Paid-to-Date:													
Estimated Completeness:	\$5,477,960	\$162,116	\$140,962	\$105,292	\$107,271	\$84,399	\$91,368	\$89,970	\$96,789	\$95,567	\$96,963	\$98,381	\$147,804
Estimated Incurred:	100.00%	99.97%	99.91%	99.88%	99.80%	99.74%	99.66%	99.60%	99.27%	98.41%	96.95%	94.81%	89.69%
Estimated IBNR Still Outstanding at 7/31/2015:	\$5,477,966	\$162,169	\$141,064	\$105,424	\$107,483	\$84,619	\$91,675	\$90,335	\$97,501	\$98,132	\$100,013	\$103,771	\$164,786
Claims Runout Paid After 6/30/2015:	\$6	\$53	\$122	\$132	\$211	\$220	\$308	\$365	\$712	\$1,564	\$3,050	\$5,390	\$16,983
Estimated Retrospective IBNR at 6/30/2015:	(50)	\$330	\$150	\$335	\$0	\$140	\$150	\$125	\$1,495	\$2,160	\$790	\$5,773	\$127,254
	\$6	\$383	\$272	\$467	\$211	\$360	\$458	\$490	\$2,207	\$3,724	\$3,840	\$11,163	\$144,237
				</									

Source data from Eyemid for claims incurred through June 30, 2013 and from Avesis for claims incurred beginning July 1, 2013.  
This lag triangle uses calculations with claims data paid through July 2015.



## Total Medical

Month	Total Paid in Month	Total Incurred in Month and Paid-to-Date	Estimated Completeness - Used in Model	Total Incurred	IBNR This Month Only	Retrospective IBNR	Retrospective IBNR - In Terms of Incurred Claims in Last Three Months	Employees	Incurred per Employee per Month	Rolling 12 Mo Avg Incurred Per Employee-Per Month	Rolling 12 Mo Trend	Rolling 3 Mo Avg Incurred Per Employee-Per Month	Rolling 3 Mo Trend
Prior Months					-\$6,727								
Aug-12	\$8,266,411	\$8,103,818	1.0001	\$8,102,642	-\$1,175	\$7,145,595		11,068	\$732.08				
Sep-12	\$7,898,504	\$7,030,043	1.0002	\$7,028,933	-\$1,109	\$6,276,024		11,179	\$628.76				
Oct-12	\$7,624,639	\$8,020,949	1.0002	\$8,019,663	-\$1,286	\$6,671,047	0.86	11,235	\$713.81	\$691.55		\$691.55	
Nov-12	\$7,022,677	\$7,402,093	1.0003	\$7,399,569	-\$2,524	\$7,047,939	0.94	11,269	\$656.63	\$666.40		\$666.40	
Dec-12	\$7,056,565	\$6,887,944	1.0003	\$6,885,547	-\$2,397	\$6,876,922	0.92	11,285	\$610.15	\$660.20		\$660.20	
Jan-13	\$8,279,718	\$8,713,085	1.0004	\$8,710,034	-\$3,051	\$7,307,238	0.95	11,226	\$775.88	\$680.89		\$680.89	
Feb-13	\$6,738,440	\$7,227,075	1.0004	\$7,224,317	-\$2,759	\$7,793,115	1.02	11,287	\$640.06	\$675.36		\$675.36	
Mar-13	\$8,178,250	\$7,538,591	1.0004	\$7,535,644	-\$2,947	\$7,150,508	0.91	11,307	\$666.46	\$694.13		\$694.13	
Apr-13	\$8,442,040	\$8,388,125	1.0004	\$8,384,641	-\$3,485	\$7,093,109	0.92	11,324	\$740.43	\$682.32		\$682.32	
May-13	\$8,478,341	\$7,681,809	1.0004	\$7,678,868	-\$2,941	\$6,293,636	0.80	11,310	\$678.94	\$695.28		\$695.28	
Jun-13	\$7,603,106	\$8,001,980	1.0004	\$7,998,833	-\$3,147	\$6,689,363	0.83	11,310	\$707.24	\$708.87		\$708.87	
Jul-13	\$7,154,348	\$7,406,086	1.0004	\$7,402,848	-\$3,238	\$6,937,863	0.90	11,344	\$652.58	\$679.59		\$679.59	
Aug-13	\$8,343,525	\$8,127,375	1.0005	\$8,123,710	-\$3,665	\$6,718,048	0.86	11,335	\$716.69	\$692.17		\$692.17	
Sep-13	\$7,531,943	\$8,305,576	1.0006	\$8,300,667	-\$4,909	\$7,486,772	0.94	11,373	\$729.86	\$690.73		\$690.73	
Oct-13	\$8,805,996	\$7,967,205	1.0006	\$7,962,283	-\$4,923	\$6,643,058	0.82	11,396	\$689.69	\$689.47		\$689.47	
Nov-13	\$7,335,480	\$7,974,051	1.0007	\$7,968,604	-\$5,447	\$7,276,182	0.90	11,427	\$697.35	\$692.86		\$692.86	3.4%
Dec-13	\$7,528,540	\$8,179,842	1.0008	\$8,172,986	-\$6,856	\$7,920,629	0.99	11,435	\$714.73	\$701.58		\$701.58	6.3%
Jan-14	\$8,742,484	\$10,002,118	1.0012	\$9,990,525	-\$11,593	\$9,168,670	1.05	11,443	\$873.07	\$709.67		\$709.67	6.6%
Feb-14	\$8,660,050	\$8,601,820	1.0014	\$8,589,720	-\$12,100	\$9,098,340	1.02	11,458	\$749.67	\$718.81		\$718.81	11.9%
Mar-14	\$9,543,826	\$8,609,818	1.0017	\$8,595,634	-\$14,185	\$8,150,147	0.90	11,454	\$750.45	\$725.81		\$725.81	15.4%
Apr-14	\$9,036,635	\$9,655,431	1.0017	\$9,638,663	-\$16,769	\$8,752,175	0.98	11,472	\$840.19	\$734.12		\$734.12	14.0%
May-14	\$10,003,729	\$9,965,829	1.0016	\$9,949,421	-\$16,408	\$8,697,867	0.93	11,492	\$865.77	\$749.69		\$749.69	14.3%
Jun-14	\$9,080,498	\$10,223,019	1.0016	\$10,206,648	-\$16,371	\$9,814,016	0.99	11,450	\$891.41	\$765.04		\$765.04	17.8%
Jul-14	\$9,704,495	\$7,665,515	0.9995	\$7,669,014	\$3,498	\$7,778,535	0.84	11,469	\$668.67	\$766.38	12.1%	\$808.62	22.1%
Aug-14	\$7,762,335	\$8,494,736	0.9982	\$8,509,844	\$15,108	\$8,525,043	0.97	11,485	\$740.95	\$768.40	12.6%	\$767.01	19.0%
Sep-14	\$7,742,691	\$8,456,388	0.9954	\$8,495,838	\$39,450	\$9,279,191	1.13	11,555	\$735.25	\$768.85	11.3%	\$714.96	10.8%
Oct-14	\$8,504,366	\$8,390,714	0.9954	\$8,429,619	\$38,905	\$9,204,444	1.09	11,611	\$726.00	\$771.13	11.8%	\$734.07	2.7%
Nov-14	\$8,120,225	\$8,069,003	0.9915	\$8,138,567	\$69,564	\$9,222,786	1.10	11,623	\$700.21	\$771.37	11.3%	\$720.49	1.7%
Dec-14	\$7,905,511	\$8,720,963	0.9893	\$8,815,014	\$94,051	\$10,132,289	1.20	11,649	\$756.72	\$774.86	10.4%	\$727.64	3.4%
Jan-15	\$8,726,337	\$9,042,354	0.9867	\$9,164,618	\$122,264	\$10,570,570	1.21	11,634	\$787.74	\$767.75	8.2%	\$748.23	-1.8%
Feb-15	\$7,682,776	\$9,567,622	0.9802	\$9,760,942	\$193,320	\$12,648,736	1.37	11,621	\$839.94	\$775.28	7.9%	\$794.80	2.0%
Mar-15	\$10,037,046	\$9,201,394	0.9696	\$9,489,449	\$288,055	\$12,101,139	1.28	11,671	\$813.08	\$780.50	7.5%	\$813.59	2.8%
Apr-15	\$10,713,106	\$9,358,557	0.9416	\$9,939,067	\$580,510	\$11,327,100	1.16	11,686	\$781.36	\$850.51	6.4%	\$834.51	7.0%
May-15	\$9,595,130	\$8,282,261	0.8839	\$9,369,854	\$1,087,592	\$11,101,823	1.16	11,731	\$798.73	\$775.77	3.5%	\$820.77	0.2%
Jun-15	\$9,705,488	\$8,257,047	0.7597	\$10,868,303	\$2,611,256	\$12,264,638	1.22	11,710	\$928.12	\$778.83	1.8%	\$859.12	-0.8%
Jul-15	\$9,388,068	\$2,116,993											
<b>Total</b>		<b>\$295,637,230</b>		<b>\$298,520,528</b>	<b>\$4,993,563</b>								

Source data from CIGNA and UHC.

Trend rates include the effect of subscriber movement between benefit plans as well as the impact of high cost claims.



## MARICOPA COUNTY ACTUARIAL ANALYSIS

## Appendix A

## MARICOPA COUNTY

## CIGNA CMG Medical

Month	Total Paid in Month	Total Incurred in Month and Paid-to-Date	Estimated Completeness - Used In Model	Total Incurred	IBNR This Month Only	Retrospective IBNR	Retrospective IBNR - In Terms of Incurred Claims in Last Three Months	Employees	Incurred per Employee per Month	Rolling 12 Mo Avg Incurred Per- Employee-Per Month	Rolling 12 Mo Trend	Rolling 3 Mo Avg Incurred Per- Employee-Per Month	Rolling 3 Mo Trend
Prior Months					-\$923								
Aug-12	\$4,637,164	\$4,221,576	1.0001	\$4,221,132	-\$444	\$3,567,199		5,951	\$709.31				
Sep-12	\$4,154,200	\$3,945,133	1.0001	\$3,944,705	-\$428	\$3,357,705		6,026	\$654.61				
Oct-12	\$3,900,479	\$3,666,999	1.0001	\$3,666,588	-\$410	\$3,123,814	0.79	6,067	\$604.35			\$656.09	
Nov-12	\$3,267,522	\$3,768,978	1.0005	\$3,767,160	-\$1,818	\$3,623,451	0.96	6,093	\$618.28			\$625.75	
Dec-12	\$3,660,315	\$3,330,297	1.0005	\$3,328,687	-\$1,610	\$3,291,823	0.92	6,095	\$546.13			\$589.59	
Jan-13	\$4,196,338	\$4,021,742	1.0005	\$4,019,778	-\$1,964	\$3,115,263	0.84	6,077	\$661.47			\$608.63	
Feb-13	\$3,255,607	\$3,605,740	1.0005	\$3,603,921	-\$1,819	\$3,463,578	0.95	6,114	\$589.45			\$599.02	
Mar-13	\$4,302,262	\$3,925,038	1.0005	\$3,923,081	-\$1,957	\$3,084,396	0.80	6,111	\$641.97			\$630.97	
Apr-13	\$3,964,582	\$3,952,572	1.0005	\$3,950,546	-\$2,026	\$3,070,360	0.80	6,112	\$646.36			\$625.93	
May-13	\$3,844,020	\$3,373,436	1.0005	\$3,371,699	-\$1,738	\$2,598,039	0.69	6,099	\$552.83			\$613.72	
Jun-13	\$3,693,832	\$3,707,022	1.0005	\$3,705,112	-\$1,910	\$2,609,320	0.71	6,084	\$608.99			\$602.73	
Jul-13	\$3,323,103	\$3,453,007	1.0005	\$3,451,228	-\$1,779	\$2,737,444	0.78	5,620	\$614.10	\$620.66		\$591.97	
Aug-13	\$3,751,674	\$3,860,699	1.0005	\$3,858,689	-\$2,009	\$2,844,459	0.77	5,589	\$690.41	\$619.08		\$637.83	-2.6%
Sep-13	\$3,377,746	\$3,567,779	1.0006	\$3,565,566	-\$2,213	\$3,032,279	0.84	5,593	\$637.51	\$617.65		\$647.34	-2.8%
Oct-13	\$3,873,653	\$3,294,393	1.0007	\$3,292,210	-\$2,183	\$2,450,836	0.69	5,580	\$590.00	\$616.46		\$639.30	-0.2%
Nov-13	\$3,208,269	\$3,338,177	1.0007	\$3,336,538	-\$2,376	\$2,579,105	0.76	5,589	\$596.98	\$614.68		\$608.16	5.3%
Dec-13	\$2,894,498	\$3,238,177	1.0011	\$3,235,873	-\$2,303	\$2,920,480	0.89	5,598	\$578.04	\$617.34		\$588.34	12.5%
Jan-14	\$3,691,015	\$4,199,851	1.0011	\$4,195,132	-\$4,718	\$3,424,597	0.95	5,610	\$747.80	\$624.54		\$640.94	9.9%
Feb-14	\$3,539,723	\$3,910,962	1.0012	\$3,906,207	-\$4,755	\$3,791,081	1.00	5,614	\$695.90	\$633.40		\$673.88	6.8%
Mar-14	\$3,867,411	\$3,584,594	1.0015	\$3,579,133	-\$5,461	\$3,502,802	0.90	5,614	\$637.54	\$633.03		\$693.71	11.5%
Apr-14	\$3,877,365	\$3,784,985	1.0015	\$3,779,423	-\$5,562	\$3,404,860	0.91	5,621	\$672.38	\$635.20		\$668.57	16.4%
May-14	\$4,507,201	\$4,181,885	1.0016	\$4,175,229	-\$6,656	\$3,072,888	0.80	5,625	\$742.26	\$650.98		\$701.42	22.7%
Jun-14	\$3,556,410	\$3,865,120	1.0014	\$3,859,812	-\$5,308	\$3,376,290	0.86	5,597	\$689.82	\$668.76	7.8%	\$726.24	12.0%
Jul-14	\$4,260,930	\$4,120,861	1.0009	\$4,117,256	-\$3,605	\$3,232,616	0.80	5,513	\$746.83	\$670.06	8.2%	\$714.13	14.0%
Aug-14	\$3,656,263	\$3,889,074	1.0007	\$3,886,184	-\$2,891	\$3,462,537	0.88	5,505	\$705.94	\$680.41	10.2%	\$738.16	15.8%
Sep-14	\$3,326,433	\$4,213,440	1.0006	\$4,210,840	-\$2,600	\$4,346,943	1.07	5,528	\$761.73	\$693.99	12.6%	\$740.20	16.6%
Oct-14	\$4,506,516	\$4,176,218	1.0005	\$4,174,208	-\$2,011	\$4,014,636	0.98	5,544	\$752.92	\$693.99	13.1%	\$708.99	15.4%
Nov-14	\$3,738,844	\$3,392,472	1.0001	\$3,392,253	-\$218	\$3,688,045	0.93	5,540	\$612.32	\$703.12	13.9%	\$679.19	4.6%
Dec-14	\$3,221,931	\$3,723,508	0.9989	\$3,727,442	\$3,934	\$4,173,556	1.11	5,544	\$725.92	\$701.30	12.3%	\$670.19	7.5%
Jan-15	\$4,145,926	\$4,018,953	0.9986	\$4,024,504	\$5,551	\$4,052,134	1.09	5,544	\$775.63	\$707.95	11.8%	\$724.63	8.8%
Feb-15	\$3,053,072	\$4,263,080	0.9948	\$4,285,381	\$22,301	\$5,284,443	1.32	5,552	\$762.35	\$718.35	13.5%	\$754.64	10.8%
Mar-15	\$4,715,277	\$4,175,214	0.9864	\$4,232,587	\$57,373	\$4,801,753	1.15	5,552	\$685.13	\$719.42	13.3%	\$741.04	2.1%
Apr-15	\$4,555,399	\$3,672,038	0.9657	\$3,802,455	\$130,417	\$4,048,809	0.99	5,550	\$648.41	\$711.59	9.3%	\$698.63	-4.3%
May-15	\$4,079,448	\$3,287,813	0.9099	\$3,613,572	\$325,759	\$3,582,934	0.92	5,573	\$680.73	\$710.85	8.1%	\$671.42	
Jun-15	\$4,031,254	\$3,089,876	0.8189	\$3,773,300	\$683,424	\$3,324,979	0.89	5,543					
Jul-15	\$3,437,495	\$1,267,579											
<b>Total</b>		<b>\$133,089,024</b>		<b>\$132,977,430</b>	<b>\$1,155,063</b>								

Source data from CIGNA.

Trend rates include the effect of subscriber movement between benefit plans as well as the impact of high cost claims.



## UHC PPO Medical

Month	Total Paid in Month	Total Incurred in Month and Paid-to-Date	Estimated Completeness - Used In Model	Total Incurred	IBNR This Month Only	Retrospective IBNR	Retrospective IBNR - in Terms of Incurred Claims in Last Three Months	Employees	Incurred per Employee per Month	Rolling 12 Mo Avg Incurred Per- Employee-Per- Month	Rolling 12 Mo Trend	Rolling 3 Mo Avg Incurred Per- Employee-Per- Month	Rolling 3 Mo Trend
Prior Months													
Aug-12													
Sep-12													
Oct-12													
Nov-12													
Dec-12													
Jan-13													
Feb-13													
Mar-13													
Apr-13													
May-13													
Jun-13													
Jul-13													
Aug-13													
Sep-13													
Oct-13													
Nov-13													
Dec-13													
Jan-14													
Feb-14													
Mar-14													
Apr-14													
May-14													
Jun-14													
Jul-14	\$646,820	\$2,560,612	0.9980	\$2,565,744	\$5,131	\$1,918,924	0.75	3,789	\$677.16	\$677.16		\$677.16	
Aug-14	\$1,982,892	\$3,332,472	0.9984	\$3,344,540	\$12,067	\$3,280,572	1.11	3,800	\$880.14	\$778.65		\$778.65	
Sep-14	\$2,770,794	\$2,741,496	0.9879	\$2,774,966	\$33,470	\$3,284,744	1.13	3,842	\$722.27	\$759.86		\$759.86	
Oct-14	\$2,554,401	\$2,792,288	0.9895	\$2,821,921	\$29,633	\$3,552,264	1.19	3,877	\$727.86	\$751.86		\$776.76	
Nov-14	\$2,785,419	\$2,642,619	0.9809	\$2,694,082	\$51,463	\$3,460,927	1.25	3,894	\$691.85	\$739.86		\$714.00	
Dec-14	\$2,564,053	\$2,814,261	0.9773	\$2,879,495	\$65,234	\$3,776,368	1.35	3,909	\$736.63	\$739.32		\$718.78	
Jan-15	\$2,656,029	\$3,213,741	0.9722	\$3,305,563	\$91,822	\$4,425,902	1.50	3,901	\$847.36	\$754.75		\$758.62	
Feb-15	\$2,764,981	\$3,598,419	0.9623	\$3,739,223	\$140,804	\$5,400,145	1.63	3,906	\$957.30	\$780.07		\$847.10	
Mar-15	\$3,088,085	\$2,990,555	0.9432	\$3,170,642	\$180,087	\$5,482,701	1.61	3,923	\$808.22	\$783.20		\$870.96	
Apr-15	\$4,164,965	\$3,672,816	0.9115	\$4,029,585	\$356,770	\$5,347,321	1.47	3,939	\$1,023.00	\$807.18		\$929.51	
May-15	\$3,503,211	\$2,699,477	0.8362	\$3,228,373	\$528,896	\$5,072,483	1.46	3,961	\$815.04	\$807.89		\$882.09	
Jun-15	\$3,269,089	\$2,661,716	0.6880	\$3,868,512	\$1,206,795	\$5,671,905	1.53	3,982	\$971.50	\$821.53		\$936.51	
Jul-15	\$3,612,244	\$642,512											
<b>Total</b>		<b>\$36,362,984</b>		<b>\$38,422,645</b>	<b>\$2,702,174</b>								

Source data from UHC.

Trend rates include the effect of subscriber movement between benefit plans as well as the impact of high cost claims.

## CIGNA OAP Medical

Month	Total Paid in Month	Total Incurred in Month and Paid-to-Date	Estimated Completeness - Used In Model	Total Incurred	IBNR This Month Only	Retrospective IBNR	Retrospective IBNR - In Terms of Incurred Claims in Last Three Months	Employees	Incurred per Employee per Month	Rolling 12 Mo Avg Incurred Per Employee-Per Month	Rolling 12 Mo Trend	Rolling 3 Mo Avg Incurred Per Employee-Per Month	Rolling 3 Mo Trend
Prior Months					-\$5,804								
Aug-12	\$2,954,816	\$2,796,942	1.0003	\$2,796,211	-\$731	\$2,405,249		3,652	\$765.67				
Sep-12	\$2,797,073	\$2,454,824	1.0003	\$2,454,143	-\$681	\$2,062,319		3,681	\$666.71				
Oct-12	\$2,846,180	\$3,153,972	1.0003	\$3,153,097	-\$875	\$2,369,236		3,689	\$854.73			\$762.37	
Nov-12	\$2,687,245	\$2,541,402	1.0003	\$2,540,696	-\$705	\$2,222,687	0.85	3,689	\$688.72			\$736.72	
Dec-12	\$2,407,304	\$2,654,076	1.0003	\$2,653,289	-\$787	\$2,468,672	0.82	3,687	\$719.63			\$754.36	
Jan-13	\$2,905,203	\$3,491,891	1.0003	\$3,490,804	-\$1,087	\$3,054,273	0.89	3,649	\$956.65			\$788.33	
Feb-13	\$2,481,373	\$2,551,244	1.0004	\$2,550,337	-\$908	\$3,123,237	1.06	3,672	\$694.54			\$790.27	
Mar-13	\$2,591,595	\$2,599,136	1.0004	\$2,598,199	-\$937	\$3,129,840	1.08	3,678	\$706.42			\$785.87	
Apr-13	\$3,314,405	\$3,074,972	1.0005	\$3,073,584	-\$1,388	\$2,889,020	1.09	3,683	\$834.53			\$745.16	
May-13	\$3,284,598	\$2,465,217	1.0005	\$2,464,101	-\$1,115	\$2,068,523	0.76	3,684	\$668.87			\$736.60	
Jun-13	\$2,590,646	\$2,652,524	1.0004	\$2,651,357	-\$1,166	\$2,129,235	0.78	3,692	\$718.14			\$740.51	
Jul-13	\$2,462,235	\$2,871,420	1.0005	\$2,869,994	-\$1,426	\$2,536,994	0.95	3,893	\$737.22	\$750.98		\$708.07	
Aug-13	\$3,231,088	\$3,160,232	1.0005	\$3,158,604	-\$1,628	\$2,464,511	0.85	3,906	\$808.65	\$754.57		\$754.67	
Sep-13	\$2,961,264	\$3,273,899	1.0008	\$3,271,240	-\$2,659	\$2,774,487	0.90	3,913	\$835.99	\$768.67		\$793.96	
Oct-13	\$3,242,770	\$3,035,732	1.0009	\$3,032,998	-\$2,734	\$2,564,715	0.81	3,932	\$771.36	\$761.73		\$805.34	5.6%
Nov-13	\$2,656,634	\$3,150,755	1.0010	\$3,147,659	-\$3,096	\$3,055,741	0.97	3,953	\$796.27	\$770.69		\$801.21	8.8%
Dec-13	\$2,987,353	\$3,317,666	1.0014	\$3,313,097	-\$4,569	\$3,381,486	1.07	3,949	\$838.97	\$780.63		\$802.20	6.3%
Jan-14	\$3,586,027	\$3,731,827	1.0018	\$3,725,010	-\$6,817	\$3,520,469	1.04	3,947	\$943.76	\$779.56		\$859.67	9.0%
Feb-14	\$3,202,353	\$3,050,568	1.0020	\$3,044,587	-\$5,981	\$3,362,703	1.00	3,955	\$769.81	\$785.83		\$850.85	7.7%
Mar-14	\$3,672,626	\$3,220,141	1.0022	\$3,213,063	-\$7,077	\$2,903,140	0.87	3,950	\$813.43	\$794.75		\$842.33	7.2%
Apr-14	\$3,448,555	\$3,621,768	1.0025	\$3,612,874	-\$8,894	\$3,087,460	0.93	3,947	\$915.35	\$801.48		\$832.86	11.8%
May-14	\$3,406,124	\$3,841,383	1.0020	\$3,833,579	-\$7,804	\$3,494,915	0.98	3,960	\$968.08	\$826.42		\$898.95	22.0%
Jun-14	\$3,424,659	\$3,994,118	1.0023	\$3,985,135	-\$8,983	\$4,055,391	1.06	3,959	\$1,006.60	\$850.46		\$963.34	30.1%
Jul-14	\$3,071,909					\$983,481	0.26						
Aug-14	\$807,002					\$176,480	0.05						
Sep-14	\$261,298					-\$84,819	(0.02)						
Oct-14	\$21,458					-\$106,277	(0.03)						
Nov-14	-\$98,428					-\$7,849	(0.00)						
Dec-14	\$1,262					-\$9,111	(0.00)						
Jan-15	\$59,615					-\$68,726	(0.02)						
Feb-15	\$44,168					-\$112,894	(0.03)						
Mar-15	-\$5,167					-\$107,727	(0.03)						
Apr-15	\$11,687					-\$119,414	(0.03)						
May-15	-\$43,362					-\$76,053	(0.02)						
Jun-15	-\$5,177					-\$70,876	(0.02)						
Jul-15	\$6,977												
Total		\$70,705,708		\$70,633,660	-\$77,853								

Source data from CIGNA.

Trend rates include the effect of subscriber movement between benefit plans as well as the impact of high cost claims.

## UHC HDHP Medical

Month	Total Paid in Month	Total Incurred in Month and Paid-to-Date	Estimated Completeness - Used in Model	Total Incurred	IBNR This Month Only	Retrospective IBNR	Retrospective IBNR - In Terms of Incurred Claims in Last Three Months	Employees	Incurred per Employee per Month	Rolling 12 Mo Avg Incurred Per Employee-Per Month	Rolling 12 Mo Trend	Rolling 3 Mo Avg Incurred Per Employee-Per Month	Rolling 3 Mo Trend
Prior Months													
Aug-12													
Sep-12													
Oct-12													
Nov-12													
Dec-12													
Jan-13													
Feb-13													
Mar-13													
Apr-13													
May-13													
Jun-13													
Jul-13													
Aug-13													
Sep-13													
Oct-13													
Nov-13													
Dec-13													
Jan-14													
Feb-14													
Mar-14													
Apr-14													
May-14													
Jun-14													
Jul-14	\$182,231	\$984,042	0.9980	\$986,014	\$1,972	\$803,784	0.82	2,167	\$455.01	\$455.01		\$455.01	
Aug-14	\$893,198	\$1,273,190	0.9954	\$1,279,120	\$5,931	\$1,189,706	1.05	2,180	\$586.75	\$520.88		\$520.88	
Sep-14	\$1,144,162	\$1,501,453	0.9943	\$1,510,032	\$8,579	\$1,555,576	1.24	2,185	\$691.09	\$577.62		\$577.62	
Oct-14	\$1,351,134	\$1,422,208	0.9921	\$1,433,490	\$11,282	\$1,637,931	1.16	2,190	\$654.56	\$596.85		\$644.13	
Nov-14	\$1,614,857	\$2,033,912	0.9911	\$2,052,232	\$18,319	\$2,075,306	1.25	2,189	\$937.52	\$664.99		\$761.06	
Dec-14	\$2,083,749	\$2,183,194	0.9887	\$2,208,077	\$24,883	\$2,199,634	1.16	2,196	\$1,005.50	\$721.74		\$865.86	
Jan-15	\$1,848,001	\$1,809,660	0.9864	\$1,834,552	\$24,892	\$2,186,185	1.08	2,189	\$838.08	\$738.36		\$927.03	
Feb-15	\$1,818,988	\$1,706,122	0.9826	\$1,736,337	\$30,215	\$2,103,533	1.09	2,190	\$792.85	\$745.17		\$878.81	
Mar-15	\$2,237,420	\$2,035,625	0.9757	\$2,086,220	\$50,595	\$1,952,334	1.04	2,196	\$950.01	\$767.93		\$860.31	
Apr-15	\$1,970,057	\$2,013,703	0.9557	\$2,107,026	\$93,323	\$2,089,303	1.06	2,197	\$959.05	\$787.04		\$900.63	
May-15	\$2,067,479	\$2,294,972	0.9079	\$2,527,909	\$232,937	\$2,549,733	1.14	2,197	\$1,150.62	\$820.09		\$1,019.89	
Jun-15	\$2,420,159	\$2,505,455	0.7765	\$3,226,492	\$721,037	\$3,356,065	1.28	2,185	\$1,476.66	\$874.81		\$1,195.44	
Jul-15	\$2,339,001	\$206,901											
<b>Total</b>		<b>\$21,970,437</b>		<b>\$22,987,501</b>		<b>\$1,223,966</b>							

Source data from UHC.

Trend rates include the effect of subscriber movement between benefit plans as well as the impact of high cost claims.



## CIGNA CFHSA Medical

Month	Total Paid in Month	Total Incurred in Month and Paid-to-Date	Estimated Completeness - Used In Model	Total Incurred	IBNR This Month Only	Retrospective IBNR	Retrospective IBNR - In Terms of Incurred Claims in Last Three Months	Employees	Incurred per Employee per Month	Rolling 12 Mo Avg Incurred Per- Employee-Per Month	Rolling 12 Mo Trend	Rolling 3 Mo Avg Incurred Per- Employee-Per Month	Rolling 3 Mo Trend
Prior Months													
Aug-12	\$674,431	\$1,085,299	1.0000	\$1,085,299		\$1,173,147		1,465	\$740.82				
Sep-12	\$947,232	\$630,085	1.0000	\$630,085		\$856,000		1,472	\$428.05			\$660.07	
Oct-12	\$877,980	\$1,199,978	1.0000	\$1,199,978		\$1,177,998	1.21	1,479	\$811.34			\$657.85	
Nov-12	\$1,067,910	\$1,091,713	1.0000	\$1,091,713		\$1,201,801	1.23	1,487	\$734.17			\$715.56	
Dec-12	\$988,945	\$903,571	1.0000	\$903,571		\$1,116,427	1.05	1,503	\$601.18			\$711.66	
Jan-13	\$1,178,177	\$1,199,452	1.0000	\$1,199,452		\$1,137,702	1.07	1,500	\$799.63			\$704.57	
Feb-13	\$1,001,460	\$1,070,090	1.0000	\$1,070,090	-\$32	\$1,206,300	1.14	1,501	\$712.90			\$726.92	
Mar-13	\$1,284,393	\$1,014,417	1.0001	\$1,014,364	-\$53	\$936,271	0.86	1,518	\$668.22			\$756.98	
Apr-13	\$1,163,053	\$1,360,562	1.0001	\$1,360,511	-\$71	\$1,133,729	0.99	1,529	\$889.80			\$921.67	
May-13	\$1,349,723	\$1,843,156	1.0000	\$1,843,068	-\$88	\$1,627,073	1.16	1,527	\$1,206.99			\$1,055.81	
Jun-13	\$1,318,629	\$1,642,434	1.0000	\$1,642,364	-\$71	\$1,950,808	1.21	1,534	\$1,070.64			\$956.12	
Jul-13	\$1,369,010	\$1,081,660	1.0000	\$1,081,626	-\$33	\$1,663,425	1.09	1,831	\$590.73	\$771.21		\$754.23	
Aug-13	\$1,360,763	\$1,106,444	1.0000	\$1,106,416	-\$28	\$1,409,078	1.10	1,840	\$601.31	\$759.58		\$658.70	
Sep-13	\$1,192,933	\$1,463,898	1.0000	\$1,463,861	-\$37	\$1,680,006	1.38	1,867	\$784.07	\$789.25		\$751.44	13.8%
Oct-13	\$1,689,573	\$1,637,080	1.0000	\$1,637,074	-\$6	\$1,627,507	1.16	1,884	\$868.94	\$794.05		\$813.50	23.7%
Nov-13	\$1,470,577	\$1,484,382	1.0000	\$1,484,406	\$25	\$1,641,337	1.07	1,885	\$787.48	\$820.07		\$915.14	28.6%
Dec-13	\$1,646,689	\$1,623,959	1.0000	\$1,624,015	\$16	\$1,618,663	1.02	1,888	\$860.18	\$844.92		\$941.85	33.7%
Jan-14	\$1,465,442	\$2,070,440	1.0000	\$2,070,382	-\$58	\$2,223,604	1.29	1,886	\$1,097.76	\$867.62		\$973.19	33.9%
Feb-14	\$1,917,973	\$1,640,290	1.0008	\$1,638,926	-\$1,364	\$1,944,557	1.09	1,889	\$867.62	\$954.20		\$1,000.54	32.2%
Mar-14	\$2,003,789	\$1,805,084	1.0009	\$1,803,438	-\$1,646	\$1,744,205	0.95	1,890	\$867.62	\$905.81		\$1,050.55	14.0%
Apr-14	\$1,710,716	\$2,248,678	1.0010	\$2,246,365	-\$2,313	\$2,279,855	1.20	1,904	\$1,179.81	\$890.03		\$1,148.13	8.7%
May-14	\$2,090,404	\$1,942,561	1.0010	\$1,940,614	-\$1,947	\$2,130,065	1.07	1,907	\$1,017.63	\$904.72			
Jun-14	\$2,109,430	\$2,363,781	1.0009	\$2,361,701	-\$2,080	\$2,382,335	1.09	1,894	\$1,246.94				
Jul-14	\$1,542,605					\$839,730	0.38						
Aug-14	\$422,981					\$416,750	0.19						
Sep-14	\$240,003					\$176,747	0.08						
Oct-14	\$70,857					\$105,890	0.05						
Nov-14	\$79,532					\$26,357	0.01						
Dec-14	\$34,516					-\$8,159	(0.00)						
Jan-15	\$16,766					-\$24,924	(0.01)						
Feb-15	\$1,566					-\$26,491	(0.01)						
Mar-15	\$1,431					-\$27,921	(0.01)						
Apr-15	\$10,998					-\$38,919	(0.02)						
May-15	-\$11,646					-\$27,273	(0.01)						
Jun-15	-\$9,838					-\$17,435	(0.01)						
Jul-15	-\$7,649												
<b>Total</b>		<b>\$33,509,077</b>		<b>\$33,499,291</b>	<b>-\$9,786</b>								

Source data from CIGNA.

Trend rates include the effect of subscriber movement between benefit plans as well as the impact of high cost claims.



## Catamaran Pharmacy

Month	Total Paid in Month	Total Incurred in Month and Paid-to-Date	Estimated Completeness - Used in Model	Total Incurred	IBNR This Month Only	Retrospective IBNR	Retrospective IBNR - In Terms of Incurred Claims in Last Three Months	Employees	Incurred per Employee per Month	Rolling 12 Mo Avg Incurred Per Employee-Per Month	Rolling 12 Mo Trend	Rolling 3 Mo Avg Incurred Per Employee-Per Month	Rolling 3 Mo Trend
Prior Months													
Aug-12	\$1,180,983	\$1,179,900	1.0000	\$1,179,900		\$7,111		9,564	\$123.37				
Sep-12	\$1,091,664	\$1,096,245	1.0000	\$1,096,245		\$11,693		9,640	\$113.72			\$120.57	
Oct-12	\$1,188,701	\$1,199,157	1.0000	\$1,199,157		\$22,149	0.02	9,623	\$124.61			\$116.99	
Nov-12	\$1,102,400	\$1,087,810	1.0000	\$1,087,810		\$7,559	0.01	9,658	\$112.63			\$119.19	
Dec-12	\$1,165,541	\$1,162,296	1.0000	\$1,162,296		\$4,314	0.00	9,659	\$120.33			\$119.27	
Jan-13	\$1,194,780	\$1,200,737	1.0000	\$1,200,737		\$10,271	0.01	9,619	\$124.83			\$120.86	
Feb-13	\$1,139,166	\$1,142,302	1.0000	\$1,142,302		\$13,407	0.01	9,729	\$117.41			\$125.59	
Mar-13	\$1,315,178	\$1,310,496	1.0000	\$1,310,496		\$8,725	0.01	9,742	\$134.52			\$124.74	
Apr-13	\$1,163,728	\$1,196,043	1.0000	\$1,196,043		\$21,040	0.02	9,780	\$122.29			\$127.68	
May-13	\$1,237,324	\$1,232,576	1.0000	\$1,232,576		\$16,292	0.01	9,765	\$126.22			\$120.77	
Jun-13	\$1,107,019	\$1,110,315	1.0000	\$1,110,315		\$19,588	0.02	9,757	\$113.80			\$123.80	
Jul-13	\$1,255,861	\$1,249,923	1.0000	\$1,249,923		\$13,649	0.01	9,513	\$131.39	\$122.09		\$123.80	
Aug-13	\$1,217,587	\$1,216,643	1.0000	\$1,216,643		\$12,706	0.01	9,495	\$128.14	\$122.49		\$124.44	
Sep-13	\$1,211,854	\$1,208,665	1.0000	\$1,208,665		\$9,517	0.01	9,506	\$127.15	\$123.61		\$128.89	
Oct-13	\$1,300,488	\$1,300,795	1.0000	\$1,300,795		\$9,824	0.01	9,512	\$136.75	\$124.62		\$130.68	8.4%
Nov-13	\$1,177,350	\$1,176,788	1.0000	\$1,176,788		\$9,262	0.01	9,542	\$123.33	\$125.51		\$129.08	10.3%
Dec-13	\$1,365,602	\$1,367,563	1.0000	\$1,367,563		\$11,222	0.01	9,547	\$143.25	\$127.42		\$134.44	12.8%
Jan-14	\$1,329,678	\$1,325,897	1.0000	\$1,325,897		\$7,441	0.01	9,557	\$138.74	\$128.58		\$135.10	13.3%
Feb-14	\$1,292,638	\$1,294,684	1.0000	\$1,294,684		\$9,487	0.01	9,569	\$135.30	\$130.07		\$139.09	15.1%
Mar-14	\$1,531,401	\$1,534,796	1.0000	\$1,534,796		\$12,883	0.01	9,564	\$160.48	\$132.24		\$144.84	15.3%
Apr-14	\$1,538,666	\$1,530,544	1.0000	\$1,530,545	\$0	\$4,761	0.00	9,568	\$159.96	\$135.37		\$151.91	21.8%
May-14	\$1,556,200	\$1,556,157	1.0000	\$1,556,158	\$1	\$4,718	0.00	9,585	\$162.35	\$138.39		\$160.93	26.0%
Jun-14	\$1,539,864	\$1,540,308	1.0000	\$1,540,312	\$3	\$5,166	0.00	9,556	\$161.19	\$142.33		\$161.17	33.4%
Jul-14	\$1,511,623	\$1,513,584	1.0000	\$1,513,588	\$3	\$7,130	0.00	9,300	\$162.75	\$144.95	18.7%	\$162.10	30.9%
Sep-14	\$1,489,332	\$1,490,379	1.0000	\$1,490,392	\$12	\$8,190	0.01	9,305	\$160.17	\$147.62	20.5%	\$161.37	29.7%
Oct-14	\$1,484,305	\$1,481,122	1.0000	\$1,481,135	\$13	\$5,020	0.00	9,370	\$158.07	\$150.19	21.5%	\$160.33	24.4%
Nov-14	\$1,597,484	\$1,599,571	1.0000	\$1,599,585	\$14	\$7,121	0.00	9,421	\$169.79	\$152.95	22.7%	\$162.68	24.5%
Dec-14	\$1,538,297	\$1,542,430	1.0000	\$1,542,480	\$50	\$11,304	0.01	9,434	\$163.50	\$156.30	24.5%	\$163.79	26.9%
Jan-15	\$1,692,841	\$1,691,716	1.0000	\$1,691,792	\$76	\$10,254	0.01	9,453	\$178.97	\$159.27	25.0%	\$170.75	27.0%
Feb-15	\$1,607,174	\$1,602,149	1.0000	\$1,602,226	\$77	\$5,306	0.00	9,445	\$169.64	\$161.85	25.9%	\$170.70	26.4%
Mar-15	\$1,492,540	\$1,499,494	0.9999	\$1,499,659	\$164	\$12,425	0.01	9,431	\$169.01	\$163.82	25.9%	\$169.21	21.6%
Apr-15	\$1,572,630	\$1,568,650	0.9998	\$1,568,914	\$264	\$8,709	0.01	9,475	\$165.58	\$164.25	24.2%	\$164.75	13.7%
May-15	\$1,663,567	\$1,663,022	0.9998	\$1,663,407	\$384	\$8,549	0.01	9,489	\$175.30	\$165.53	22.3%	\$166.63	9.7%
Jun-15	\$1,744,552	\$1,744,955	0.9996	\$1,745,579	\$625	\$9,576	0.01	9,534	\$183.09	\$167.26	20.9%	\$174.66	8.5%
Jul-15	\$1,860,761	\$1,859,640	0.9995	\$1,860,589	\$948	\$9,403	0.01	9,525	\$195.34	\$170.10	19.5%	\$184.58	14.5%
Total	\$6,768	\$48,477,353		\$48,479,988	\$2,635								

Source data from Catamaran.

## CIGNA Dental

Month	Total Paid in Month	Total Incurred in Month and Paid-to-Date	Estimated Completeness - Used in Model	Total Incurred	IBNR This Month Only	Retrospective IBNR	Retrospective IBNR - In Terms of Incurred Claims in Last Three Months	Employees	Incurred per Employee per Month	Rolling 12 Mo Avg Incurred Per Employee-Per Month	Rolling 12 Mo Trend	Rolling 3 Mo Avg Incurred Per Employee-Per Month	Rolling 3 Mo Trend
Prior Months					\$74								
Aug-12	\$359,171	\$364,276	0.9997	\$364,383	\$107	\$498,409		4,894	\$74.46				
Sep-12	\$271,464	\$263,253	0.9997	\$263,330	\$77	\$490,275		4,945	\$53.25			\$64.47	
Oct-12	\$341,844	\$325,806	0.9996	\$325,932	\$126	\$474,363	1.49	4,961	\$65.70			\$57.98	
Nov-12	\$268,316	\$273,979	0.9993	\$274,166	\$188	\$480,214	1.67	4,985	\$55.00			\$57.22	
Dec-12	\$272,119	\$254,342	0.9992	\$254,550	\$208	\$462,644	1.62	4,996	\$50.95			\$53.67	
Jan-13	\$313,772	\$273,299	0.9989	\$273,596	\$297	\$422,468	1.58	4,969	\$55.06			\$54.57	
Feb-13	\$267,171	\$287,830	0.9985	\$288,249	\$419	\$443,546	1.63	4,997	\$57.68			\$58.58	
Mar-13	\$296,376	\$314,800	0.9983	\$315,324	\$524	\$462,495	1.58	5,006	\$62.99			\$61.24	
Apr-13	\$306,204	\$315,437	0.9980	\$316,073	\$637	\$472,363	1.54	5,014	\$63.04			\$62.79	
May-13	\$308,920	\$312,099	0.9976	\$312,840	\$741	\$476,284	1.51	5,018	\$62.34			\$62.68	
Jun-13	\$309,014	\$314,260	0.9972	\$315,134	\$875	\$482,404	1.53	5,030	\$62.65			\$66.73	
Jul-13	\$334,325	\$392,569	0.9956	\$394,314	\$1,744	\$542,392	1.59	5,244	\$75.19	\$61.53		\$66.77	
Aug-13	\$363,154	\$339,659	0.9939	\$341,733	\$2,075	\$520,972	1.49	5,224	\$65.42	\$60.77		\$67.75	
Sep-13	\$296,329	\$291,543	0.9932	\$293,530	\$1,988	\$518,172	1.51	5,241	\$56.01	\$61.00		\$65.54	
Oct-13	\$332,751	\$356,256	0.9902	\$359,786	\$3,530	\$545,208	1.64	5,256	\$68.45	\$61.23		\$63.29	-1.8%
Nov-13	\$290,298	\$284,704	0.9878	\$288,207	\$3,503	\$543,116	1.73	5,286	\$54.52	\$61.19		\$59.66	2.9%
Dec-13	\$288,738	\$292,099	0.9861	\$296,220	\$4,121	\$550,598	1.75	5,283	\$56.07	\$61.62		\$59.68	4.3%
Jan-14	\$344,035	\$314,185	0.9819	\$319,967	\$5,782	\$526,530	1.75	5,294	\$60.44	\$62.07		\$57.01	6.2%
Feb-14	\$299,181	\$289,836	0.9785	\$296,194	\$6,359	\$523,543	1.72	5,297	\$55.92	\$61.92		\$57.48	5.3%
Mar-14	\$326,835	\$341,053	0.9772	\$349,011	\$7,957	\$545,719	1.70	5,301	\$65.84	\$62.16		\$60.73	3.7%
Apr-14	\$326,815	\$318,763	0.9721	\$327,900	\$9,137	\$546,804	1.69	5,324	\$61.59	\$62.04		\$61.11	-0.2%
May-14	\$316,403	\$291,571	0.9686	\$301,035	\$9,464	\$531,435	1.63	5,330	\$56.48	\$61.55		\$61.30	-2.4%
Jun-14	\$312,352	\$357,998	0.9671	\$370,084	\$12,186	\$589,167	1.77	5,308	\$69.72	\$62.14		\$62.60	-0.1%
Jul-14	\$370,315	\$426,298	0.9594	\$444,344	\$18,046	\$663,196	1.78	5,536	\$80.26	\$62.56	1.7%	\$68.82	3.1%
Aug-14	\$396,871	\$362,870	0.9545	\$380,168	\$17,298	\$646,493	1.62	5,558	\$68.40	\$62.81	3.3%	\$72.80	7.4%
Sep-14	\$344,391	\$329,345	0.9515	\$346,122	\$16,777	\$648,223	1.66	5,585	\$61.97	\$63.31	3.8%	\$70.21	7.1%
Oct-14	\$354,327	\$328,006	0.9424	\$348,060	\$20,054	\$641,956	1.79	5,588	\$62.29	\$62.79	2.5%	\$64.22	1.5%
Nov-14	\$323,728	\$293,864	0.9366	\$313,750	\$19,885	\$631,977	1.88	5,579	\$56.24	\$62.93	2.8%	\$60.17	0.8%
Dec-14	\$335,234	\$308,806	0.9324	\$331,178	\$22,372	\$627,921	1.90	5,578	\$59.37	\$63.21	2.6%	\$59.30	-0.6%
Jan-15	\$354,022	\$308,031	0.9211	\$334,415	\$26,385	\$608,314	1.86	5,564	\$60.10	\$63.18	1.9%	\$58.57	2.7%
Feb-15	\$326,895	\$286,512	0.9133	\$313,695	\$27,183	\$595,114	1.82	5,565	\$56.37	\$63.22	2.1%	\$58.61	2.0%
Mar-15	\$346,739	\$297,820	0.9030	\$329,580	\$31,959	\$577,954	1.77	5,584	\$59.02	\$62.65	0.8%	\$58.50	-3.7%
Apr-15	\$328,502	\$284,600	0.8811	\$323,011	\$38,411	\$572,463	1.78	5,588	\$57.80	\$62.34	0.5%	\$57.73	-5.5%
May-15	\$310,937	\$266,266	0.8500	\$313,245	\$46,980	\$574,772	1.79	5,601	\$55.93	\$62.29	1.2%	\$57.58	-6.1%
Jun-15	\$358,793	\$341,284	0.7791	\$438,022	\$96,738	\$654,002	1.83	5,588	\$78.39	\$63.01	1.4%	\$64.04	2.3%
Jul-15	\$406,036	\$206,239											
<b>Total</b>	<b>\$11,209,255</b>	<b>\$11,457,147</b>		<b>\$11,457,147</b>	<b>\$454,205</b>								

Source data from CIGNA.



## Avesis and EyemEd Vision

Month	Total Paid in Month	Total Incurred in Month and Paid-to-Date	Estimated Completeness - Used in Model	Total Incurred	IBNR This Month Only	Retrospective IBNR	Retrospective IBNR - in Terms of Incurred Claims in Last Three Months	Employees	Incurred per Employee per Month	Rolling 12 Mo Avg Incurred Per-Employee-Per-Month	Rolling 12 Mo Trend	Rolling 3 Mo Avg Incurred Per-Employee-Per-Month	Rolling 3 Mo Trend
Prior Months													
Aug-12	\$164,849	\$164,589	1.0000	\$164,589		\$149,502		10,719	\$15.35				
Sep-12	\$166,111	\$111,427	1.0000	\$111,427		\$94,818		10,830	\$10.29				
Oct-12	\$104,537	\$100,136	1.0000	\$100,136		\$90,418	0.72	10,871	\$9.21			\$11.62	
Nov-12	\$95,699	\$90,095	1.0000	\$90,095		\$84,814	0.84	10,911	\$8.26			\$9.25	
Dec-12	\$112,214	\$95,127	1.0000	\$95,127		\$67,727	0.71	10,915	\$8.72			\$8.73	
Jan-13	\$85,247	\$88,141	1.0000	\$88,141		\$70,621	0.78	10,848	\$8.13			\$8.37	
Feb-13	\$80,713	\$97,341	1.0000	\$97,341		\$87,249	0.93	10,913	\$8.92			\$8.59	
Mar-13	\$140,172	\$110,848	1.0000	\$110,848		\$57,925	0.59	10,922	\$10.15			\$9.06	
Apr-13	\$100,105	\$107,275	1.0000	\$107,275		\$65,095	0.62	10,926	\$9.82			\$9.63	
May-13	\$96,637	\$116,841	1.0000	\$116,841		\$85,299	0.76	10,904	\$10.72			\$10.23	
Jun-13	\$147,547	\$213,476	1.0000	\$213,476		\$151,228	1.04	10,903	\$19.58			\$13.37	
Jul-13	\$149,661	\$155,615	1.0000	\$155,615		\$157,193	0.97	11,184	\$13.91	\$11.09		\$14.74	
Aug-13	\$175,982	\$147,359	1.0000	\$147,359		\$128,569	0.75	11,182	\$13.18	\$10.91		\$15.56	
Sep-13	\$115,869	\$108,008	1.0000	\$108,008		\$120,708	0.88	11,209	\$9.64	\$10.85		\$12.24	
Oct-13	\$131,121	\$97,964	1.0000	\$97,964		\$87,551	0.74	11,222	\$8.73	\$10.81		\$10.51	-9.5%
Nov-13	\$83,756	\$84,760	1.0000	\$84,760		\$88,555	0.91	11,225	\$7.55	\$10.75		\$8.64	-6.6%
Dec-13	\$85,293	\$85,293	1.0000	\$85,293		\$92,907	1.04	11,205	\$7.61	\$10.66		\$7.96	-8.8%
Jan-14	\$88,901	\$88,717	1.0000	\$88,717		\$82,724	0.96	11,206	\$7.92	\$10.64		\$7.89	-8.0%
Feb-14	\$99,740	\$97,771	1.0000	\$97,771		\$80,754	0.93	11,214	\$7.83	\$10.55		\$7.79	-9.3%
Mar-14	\$94,533	\$98,467	1.0000	\$98,467		\$84,688	0.92	11,194	\$8.80	\$10.44		\$8.18	-9.8%
Apr-14	\$84,520	\$92,492	1.0000	\$92,492		\$92,660	1.00	11,202	\$8.26	\$10.31		\$8.29	-13.9%
May-14	\$106,614	\$98,437	1.0000	\$98,437		\$84,483	0.88	11,196	\$8.79	\$10.15		\$8.62	-15.8%
Jun-14	\$98,593	\$147,523	1.0000	\$147,528	\$6	\$133,418	1.18	11,137	\$13.25	\$9.62	-12.9%	\$10.10	-24.5%
Jul-14	\$185,593	\$162,116	0.9997	\$162,169	\$53	\$109,993	0.81	11,309	\$14.34	\$9.66	-12.0%	\$12.13	-17.7%
Aug-14	\$126,163	\$140,962	0.9991	\$141,084	\$122	\$124,915	0.83	11,330	\$12.45	\$9.60	-11.9%	\$13.35	-14.2%
Sep-14	\$122,609	\$105,292	0.9988	\$105,424	\$132	\$107,729	0.79	11,378	\$9.27	\$9.57	-11.0%	\$12.02	-1.8%
Oct-14	\$129,858	\$107,271	0.9980	\$107,483	\$211	\$85,354	0.72	11,420	\$9.41	\$9.62	-10.6%	\$10.38	-1.3%
Nov-14	\$80,796	\$84,399	0.9974	\$84,619	\$220	\$89,177	0.90	11,417	\$7.41	\$9.61	-9.5%	\$8.70	0.7%
Dec-14	\$101,810	\$91,368	0.9966	\$91,675	\$308	\$79,042	0.84	11,438	\$8.01	\$9.64	-9.4%	\$8.28	4.0%
Jan-15	\$78,835	\$89,970	0.9960	\$90,335	\$365	\$90,542	1.02	11,406	\$7.92	\$9.64	-8.0%	\$7.78	1.2%
Feb-15	\$89,644	\$96,789	0.9927	\$97,501	\$712	\$98,400	1.06	11,396	\$8.56	\$9.71	-7.2%	\$8.16	4.9%
Mar-15	\$86,500	\$96,567	0.9841	\$98,132	\$1,564	\$110,032	1.15	11,435	\$8.58	\$9.69	-5.6%	\$8.35	2.1%
Apr-15	\$104,413	\$96,963	0.9695	\$100,013	\$3,050	\$105,632	1.07	11,444	\$8.74	\$9.73	-3.9%	\$8.63	4.0%
May-15	\$88,078	\$98,391	0.9481	\$103,771	\$5,390	\$121,326	1.21	11,463	\$9.05	\$9.75	2.3%	\$8.79	2.0%
Jun-15	\$118,296	\$147,804	0.8969	\$164,786	\$16,983	\$167,817	1.37	11,438	\$14.41	\$9.85		\$10.73	6.3%
Jul-15	\$189,431	\$50,729											
Total	\$3,956,316	\$3,956,316		\$3,934,701	\$29,115								

Source data from EyeMed through June 30, 2013 and through Avesis beginning July 1, 2013.

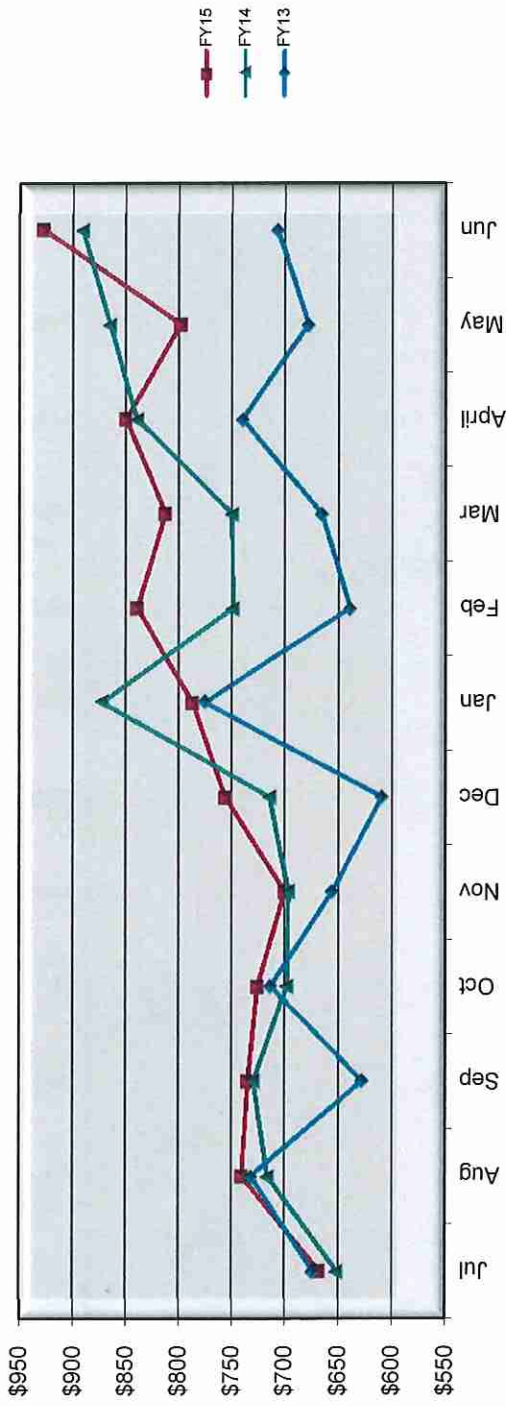
## Magellan Health Services - Behavioral Health

Month	Total Paid in Month	Total Incurred in Month and Paid-to-Date	Estimated Completeness - Used in Model	Total Incurred	IBNR This Month Only	Retrospective IBNR	Retrospective IBNR - In Terms of Incurred Claims in Last Three Months	Employees	Incurred per Employee per Month	Rolling 12 Mo Avg Incurred Per Employee-Per Month	Rolling 12 Mo Trend	Rolling 3 Mo Avg Incurred Per Employee-Per Month	Rolling 3 Mo Trend
Prior Months													
Aug-12	\$131,682	\$115,353	1.0000	\$115,353		\$369,961		9,606	\$12.01				
Sep-12	\$96,620	\$156,924	1.0000	\$156,924		\$430,265		9,711	\$16.16			\$12.44	
Oct-12	\$332,520	\$89,267	1.0000	\$89,267		\$187,012	1.55	9,759	\$9.15			\$11.68	
Nov-12	\$76,015	\$95,267	1.0000	\$95,267		\$206,265	1.81	9,785	\$9.74			\$8.83	
Dec-12	\$117,005	\$74,579	1.0000	\$74,579		\$163,838	1.90	9,785	\$7.62			\$10.10	
Jan-13	\$76,517	\$126,004	1.0000	\$126,004		\$213,326	2.16	9,728	\$12.95			\$9.59	
Feb-13	\$85,852	\$80,222	1.0000	\$80,222		\$207,697	2.22	9,768	\$8.20			\$10.74	
Mar-13	\$78,497	\$108,292	1.0000	\$108,292		\$237,492	2.27	9,791	\$11.06			\$10.78	
Apr-13	\$122,248	\$128,057	1.0000	\$128,057		\$243,301	2.31	9,797	\$13.07			\$11.36	
May-13	\$84,241	\$97,445	1.0000	\$97,445		\$256,505	2.31	9,785	\$9.96			\$10.24	
Jun-13	\$112,631	\$75,222	1.0000	\$75,222		\$219,096	2.19	9,778	\$7.69			\$9.39	
Jul-13	\$83,692	\$100,142	1.0000	\$100,142		\$235,546	2.59	9,514	\$10.53	\$10.68		\$8.73	
Aug-13	\$89,193	\$75,720	1.0000	\$75,720		\$222,072	2.65	9,496	\$7.97	\$10.34		\$7.92	
Sep-13	\$126,678	\$50,040	1.0000	\$50,040		\$145,434	1.93	9,507	\$5.26	\$9.43		\$7.50	
Oct-13	\$105,364	\$88,087	1.0000	\$88,087		\$128,157	1.80	9,513	\$9.26	\$9.44		\$8.00	
Nov-13	\$78,952	\$90,555	1.0000	\$90,555		\$139,760	1.83	9,542	\$9.49	\$9.42		\$9.41	
Dec-13	\$85,111	\$90,424	1.0000	\$90,424	-\$4	\$145,068	1.62	9,547	\$9.47	\$9.58		\$8.00	
Jan-14	\$95,708	\$106,975	1.0001	\$106,965	-\$10	\$156,325	1.63	9,557	\$11.19	\$9.43		\$10.05	
Feb-14	\$95,041	\$112,867	1.0001	\$112,851	-\$16	\$174,135	1.68	9,569	\$11.79	\$9.73		\$10.82	
Mar-14	\$136,981	\$114,865	0.9994	\$114,737	-\$72	\$151,891	1.36	9,564	\$12.00	\$9.81		\$11.66	
Apr-14	\$90,942	\$73,516	1.0002	\$73,498	-\$18	\$134,447	1.34	9,568	\$7.68	\$9.36		\$10.49	
May-14	\$104,022	\$80,716	1.0003	\$80,690	-\$26	\$111,115	1.24	9,585	\$8.42	\$9.23		\$9.37	
Jun-14	\$117,124	\$155,887	1.0005	\$155,812	-\$75	\$149,803	1.45	9,304	\$16.75	\$9.98		\$10.95	
Jul-14	\$93,873	\$137,114	1.0006	\$137,038	-\$76	\$192,968	1.55	9,300	\$14.74	\$10.34	-3.2%	\$13.30	
Aug-14	\$122,812	\$102,893	1.0006	\$102,634	-\$58	\$172,791	1.31	9,306	\$11.03	\$10.59	2.4%	\$14.17	
Sep-14	\$124,620	\$92,439	0.9997	\$92,470	\$31	\$140,641	1.27	9,370	\$9.87	\$10.97	16.3%	\$11.88	
Oct-14	\$87,788	\$122,443	0.9716	\$126,020	\$3,576	\$198,873	1.86	9,421	\$13.38	\$11.32	19.8%	\$11.42	
Nov-14	\$49,204	\$85,109	0.9711	\$87,638	\$2,529	\$237,307	2.33	9,434	\$9.29	\$11.30	19.9%	\$10.84	
Dec-14	\$125,215	\$68,975	0.9705	\$71,073	\$2,098	\$183,165	1.93	9,453	\$7.52	\$11.14	16.3%	\$10.06	
Jan-15	\$124,863	\$83,310	0.9533	\$87,394	\$4,084	\$145,697	1.78	9,445	\$9.25	\$10.98	16.4%	\$8.69	
Feb-15	\$90,990	\$78,747	0.9390	\$83,865	\$5,119	\$138,572	1.72	9,431	\$8.89	\$10.73	10.3%	\$8.55	
Mar-15	\$116,734	\$89,163	0.9317	\$95,695	\$6,532	\$117,534	1.32	9,475	\$10.10	\$10.58	7.8%	\$9.42	
Apr-15	\$60,069	\$71,239	0.8996	\$79,187	\$7,949	\$116,633	1.35	9,489	\$8.35	\$10.63	13.6%	\$9.11	
May-15	\$77,854	\$61,493	0.8251	\$74,528	\$13,035	\$113,307	1.36	9,534	\$7.82	\$10.58	14.6%	\$6.75	
Jun-15	\$58,683	\$38,064	0.5167	\$73,673	\$35,610	\$128,297	1.69	9,525	\$7.73	\$9.83	-1.5%	\$7.97	
Jul-15	\$60,268	\$12,322											
Total		\$3,329,337		\$3,397,366	\$80,351								

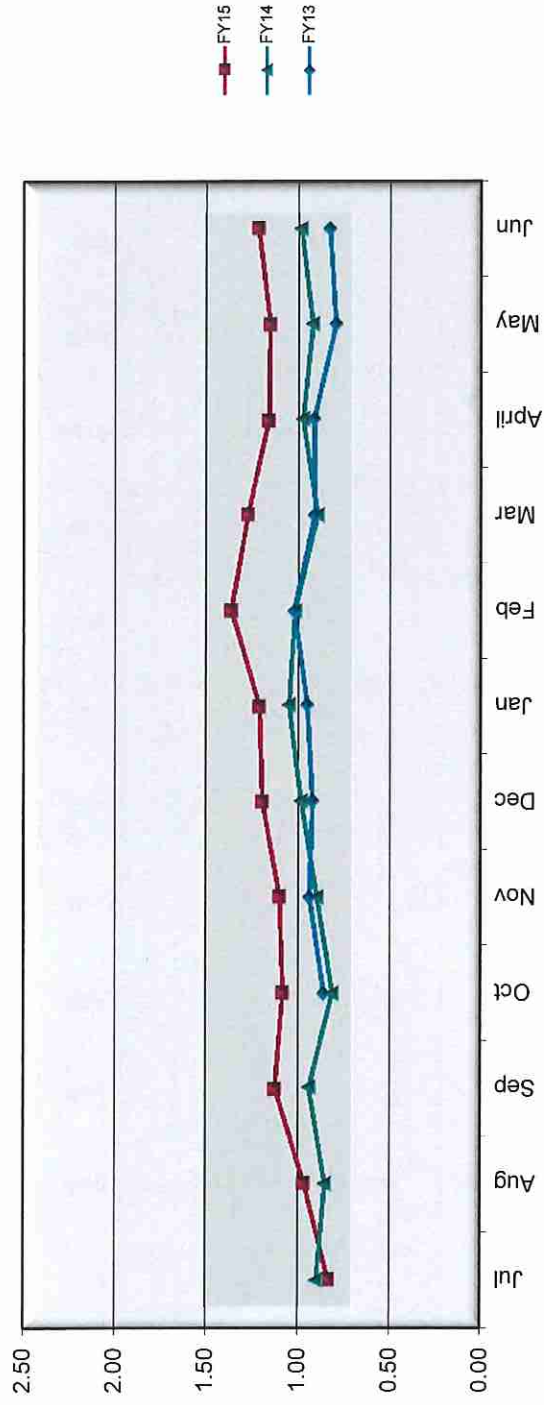
Source data from Magellan.



Per-Employee-Per-Month Total Medical Claims

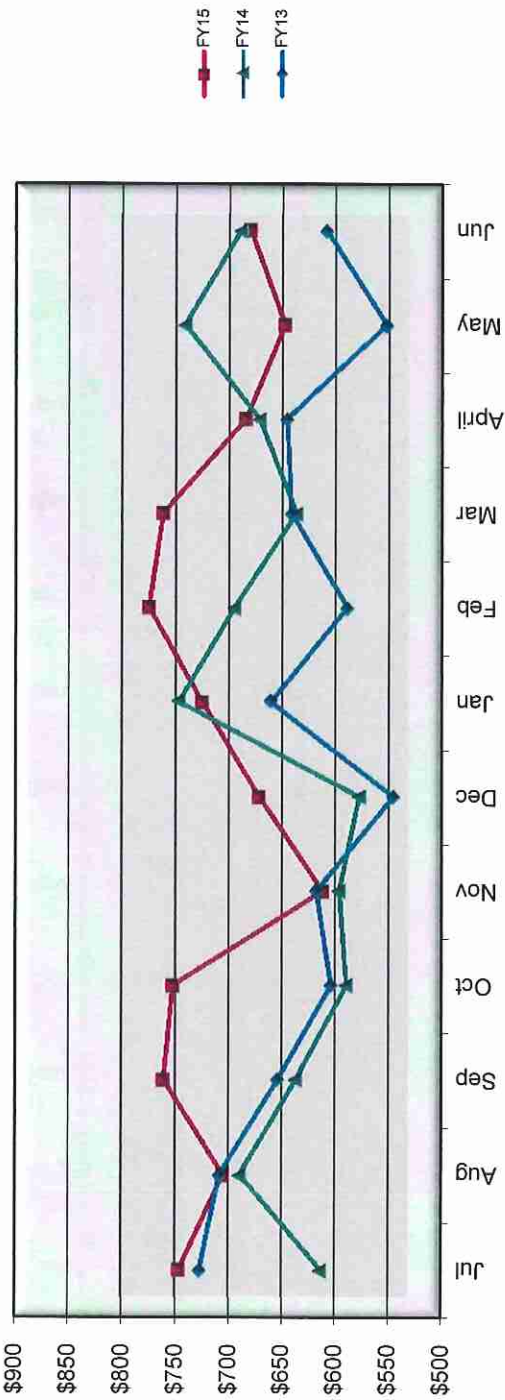


Retrospective IBNR In Terms of Incurred Total Medical Claims in Last Three Months

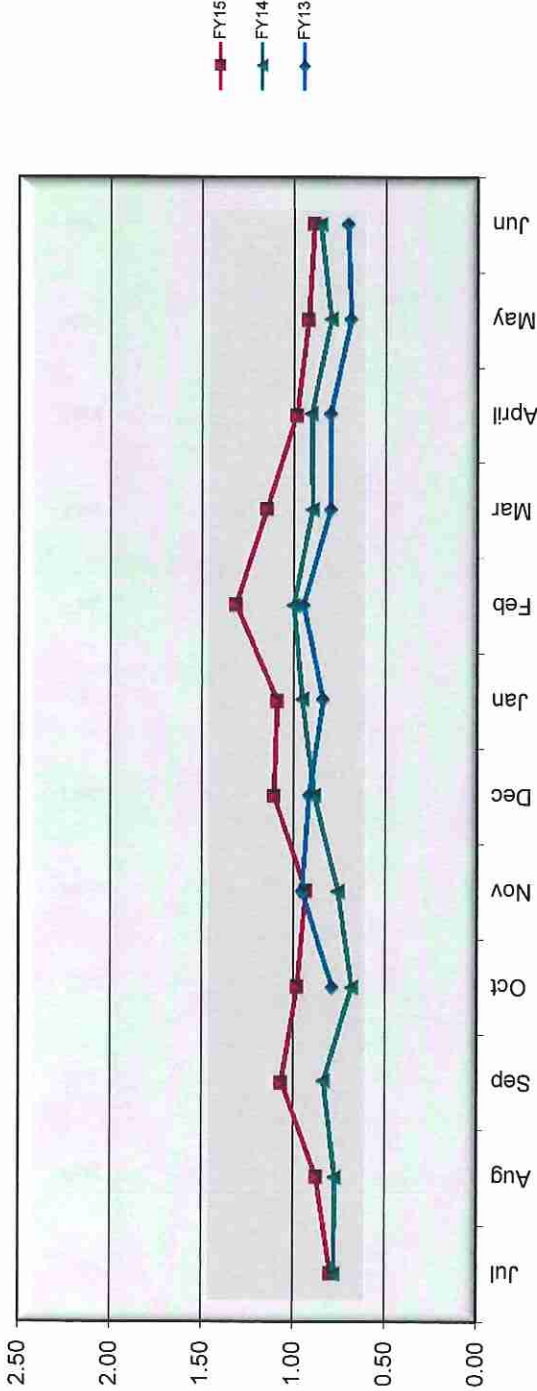


Data reflects the most recent 36 months.

Per-Employee-Per-Month CIGNA CMG Medical Claims

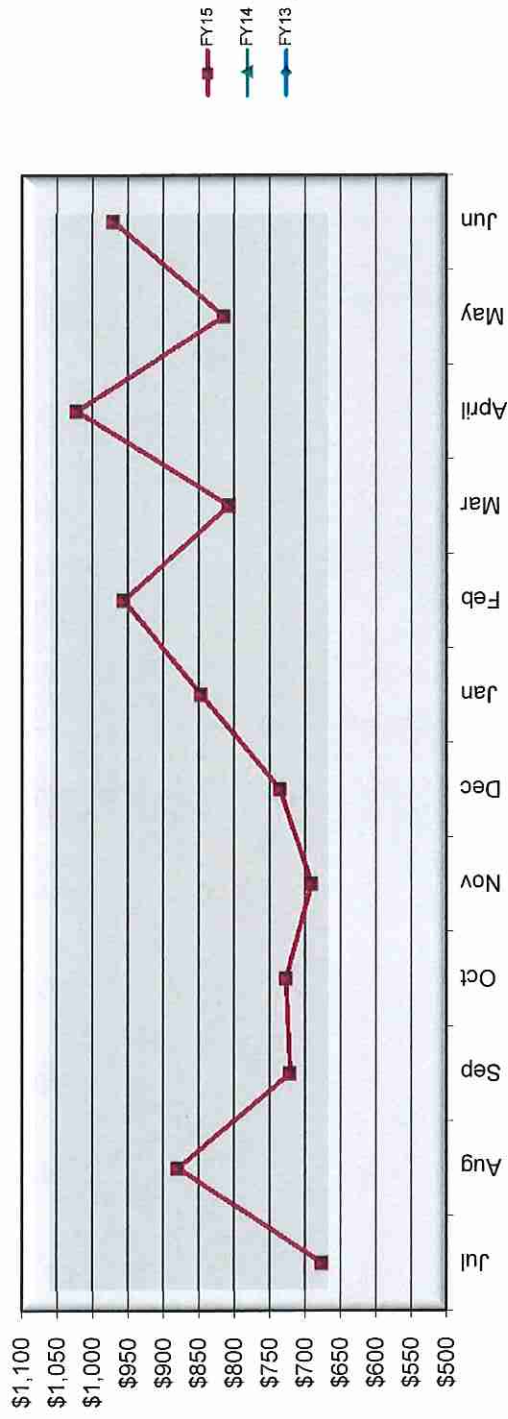


Retrospective IBNR In Terms of Incurred CIGNA CMG Medical Claims in Last Three Months

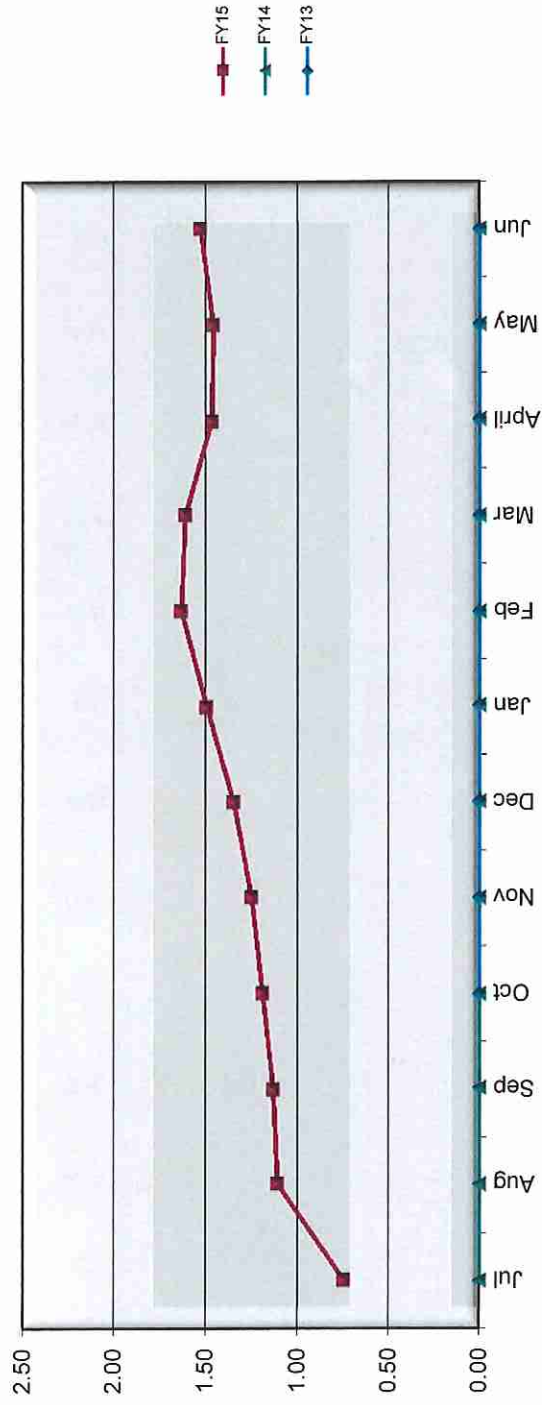


Data reflects the most recent 36 months.

Per-Employee-Per-Month UHC PPO Medical Claims

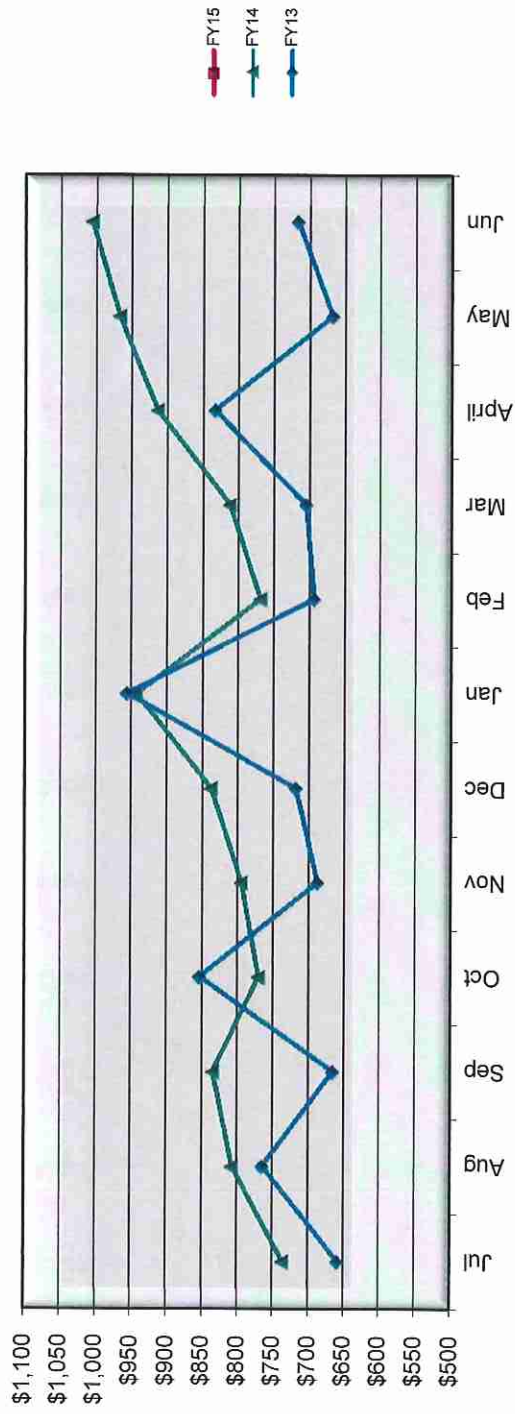


Retrospective IBNR In Terms of Incurred UHC PPO Medical Claims in Last Three Months

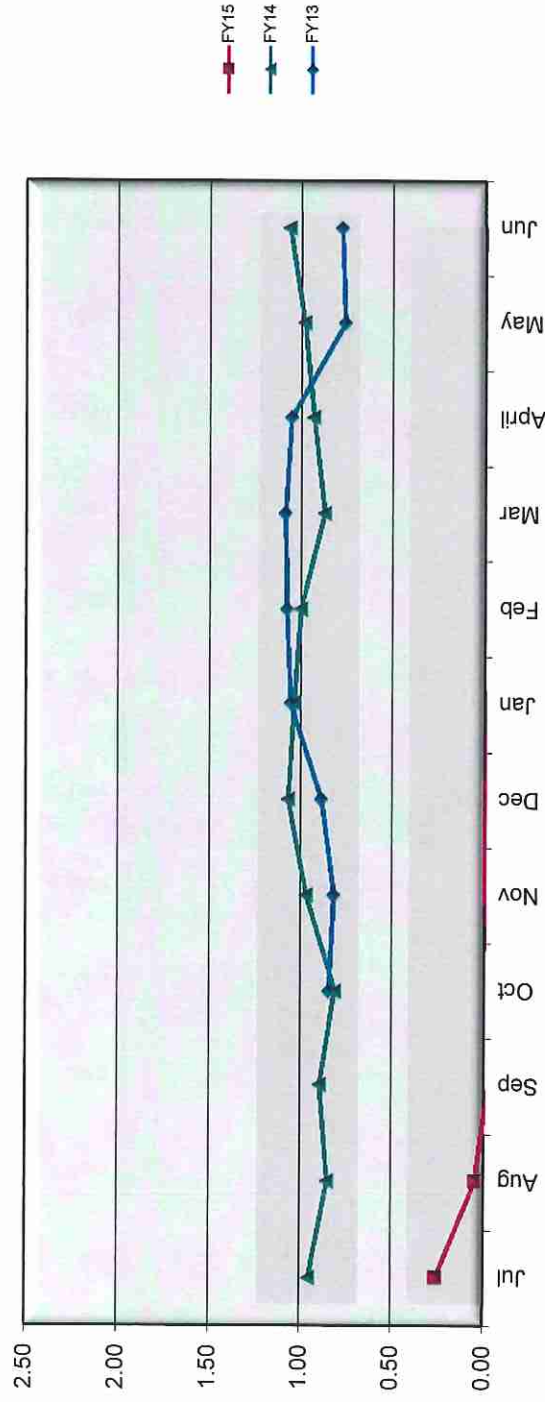


Data reflects the most recent 36 months.

Per-Employee-Per-Month CIGNA OAP Medical Claims



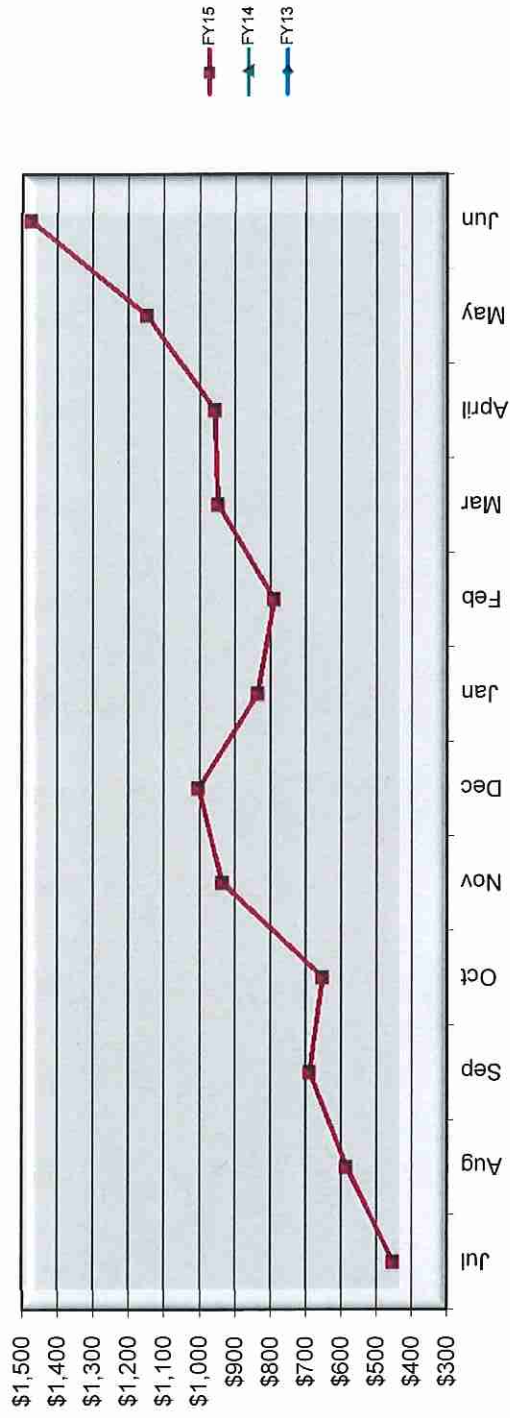
Retrospective IBNR In Terms of Incurred CIGNA OAP Medical Claims in Last Three Months



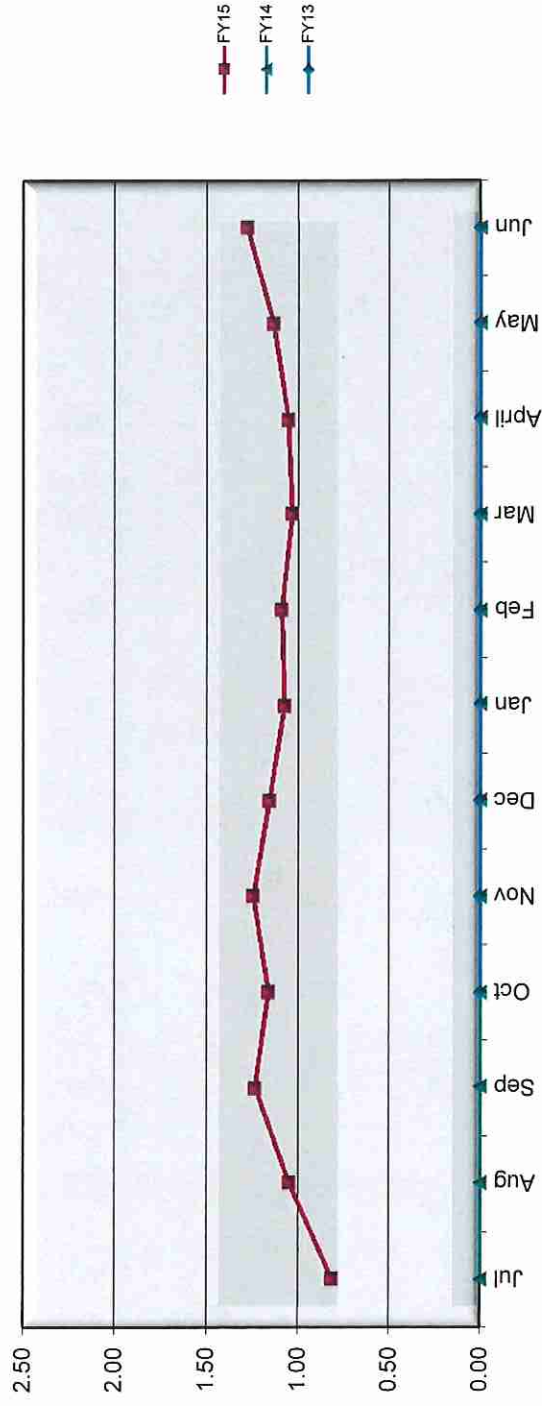
Data reflects the most recent 36 months. For FY15, the IBNR is expressed in terms of average monthly claims for April through June 2014.



Per-Employee-Per-Month UHC HDHP Medical Claims

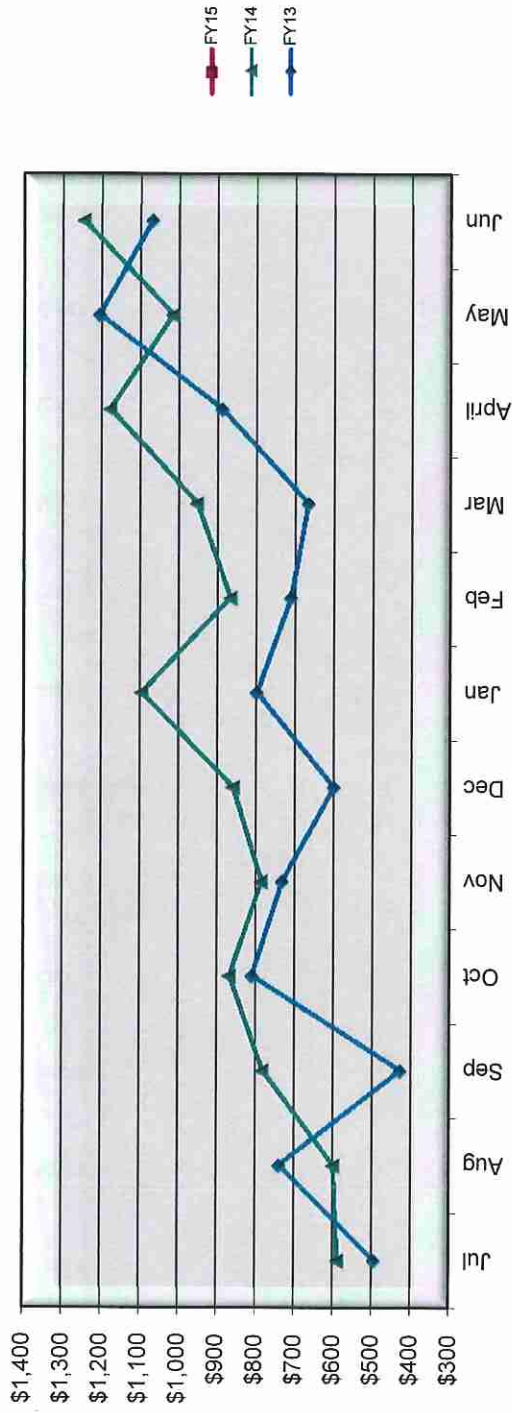


Retrospective IBNR In Terms of Incurred UHC HDHP Medical Claims in Last Three Months

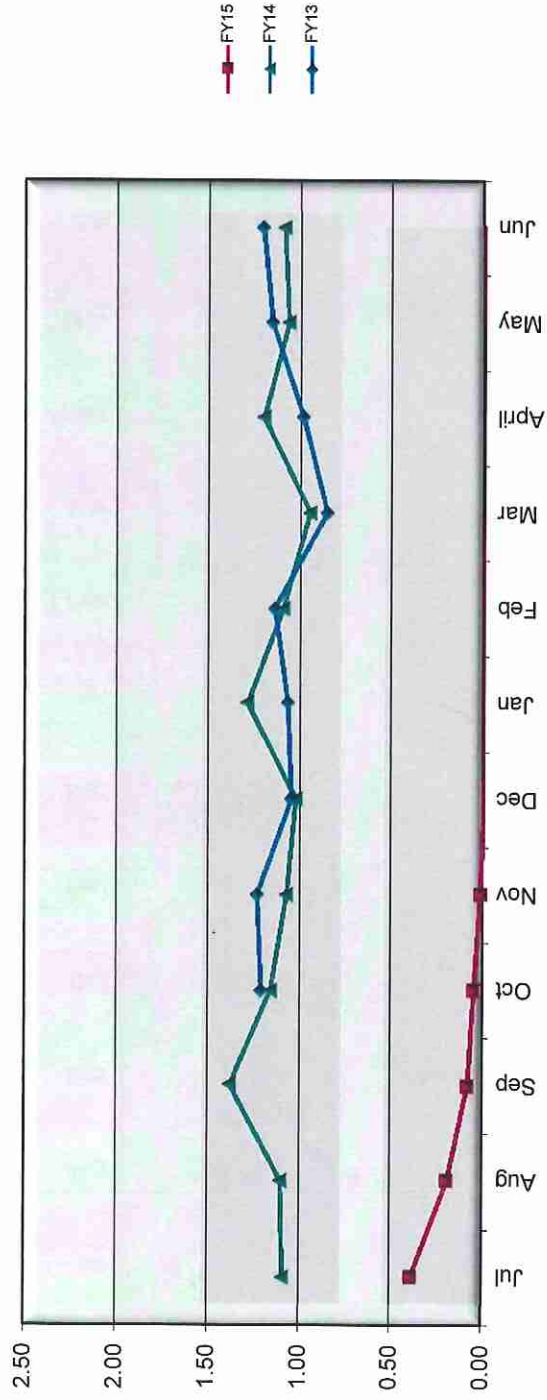


Data reflects the most recent 36 months.

Per-Employee-Per-Month CIGNA CFHSA Medical Claims

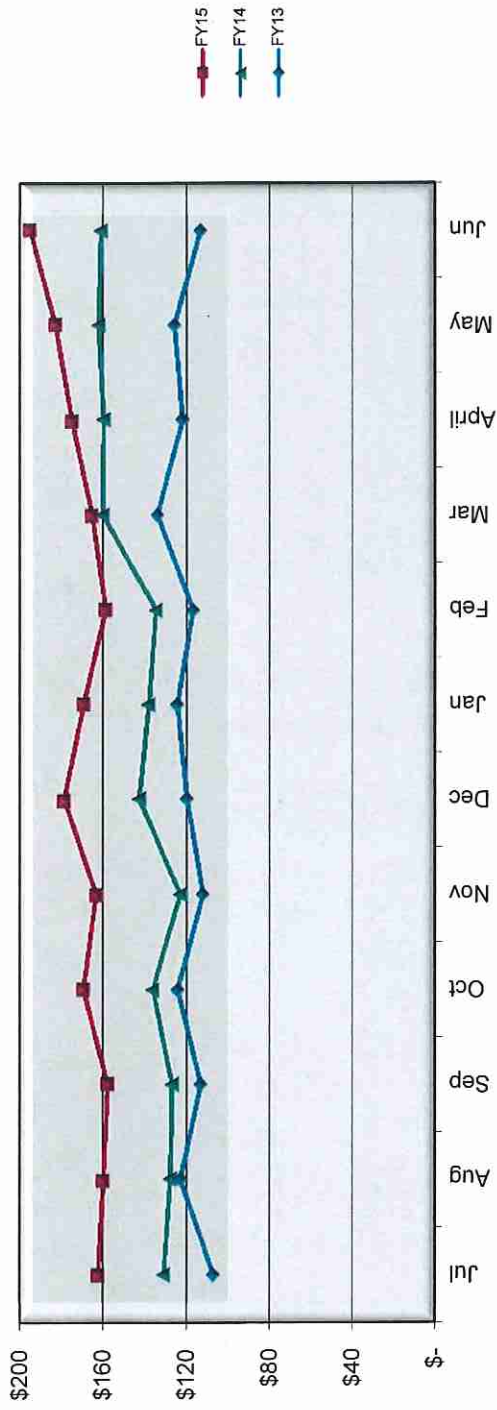


Retrospective IBNR In Terms of Incurred CIGNA CFHSA Medical Claims in Last Three Months

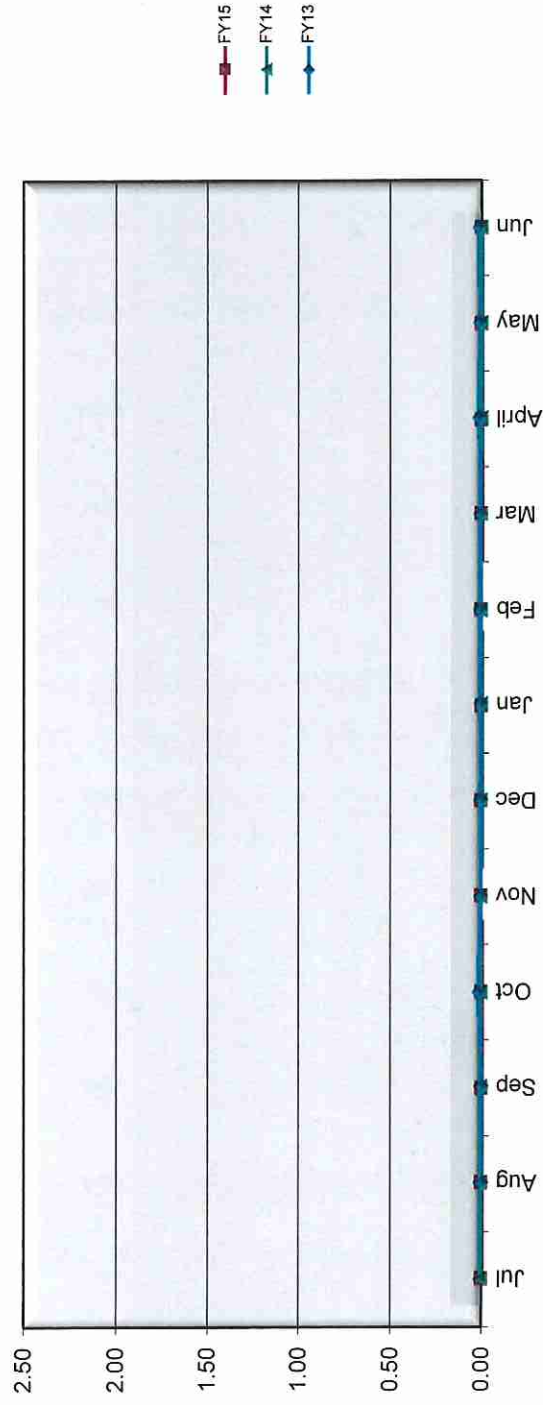


Data reflects the most recent 36 months. For FY15, the IBNR is expressed in terms of average monthly claims for April through June 2014.

Per-Employee-Per-Month Catamaran Pharmacy Claims

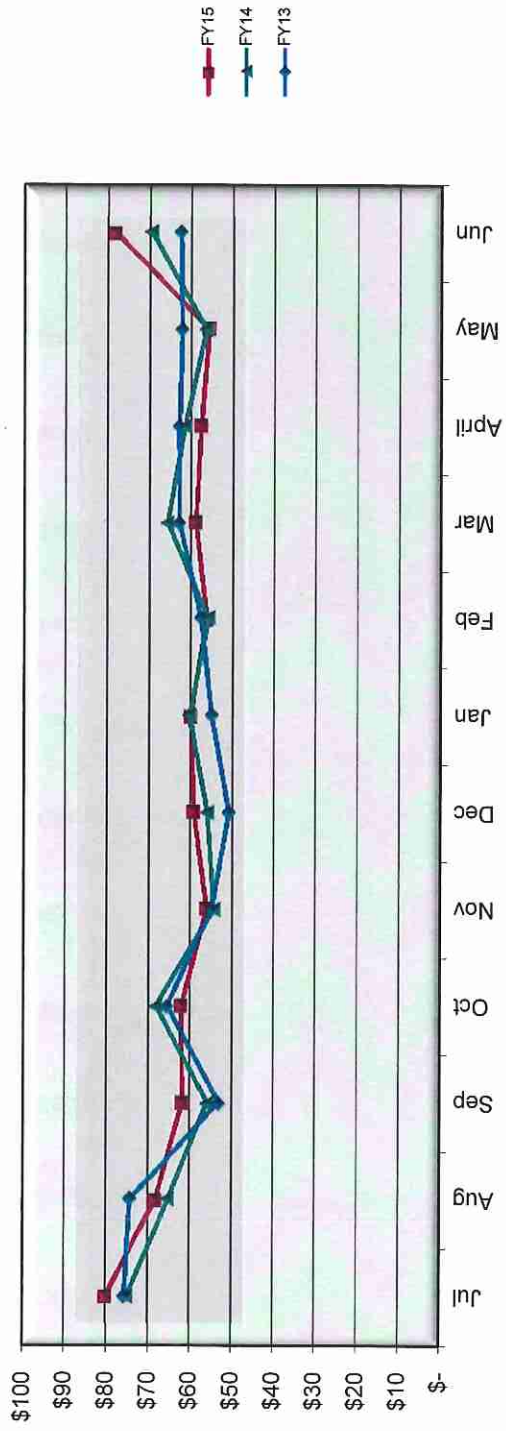


Retrospective IBNR In Terms of Incurred Catamaran Pharmacy Claims in Last Three Months

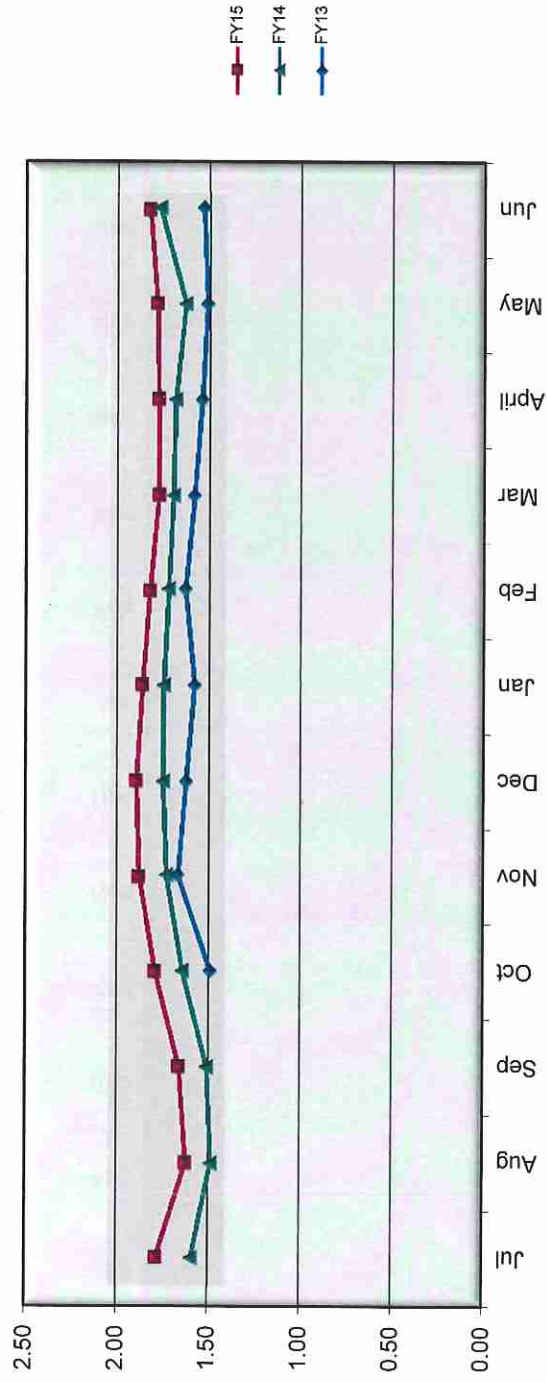


Data reflects the most recent 36 months.

Per-Employee-Per-Month CIGNA Dental Claims



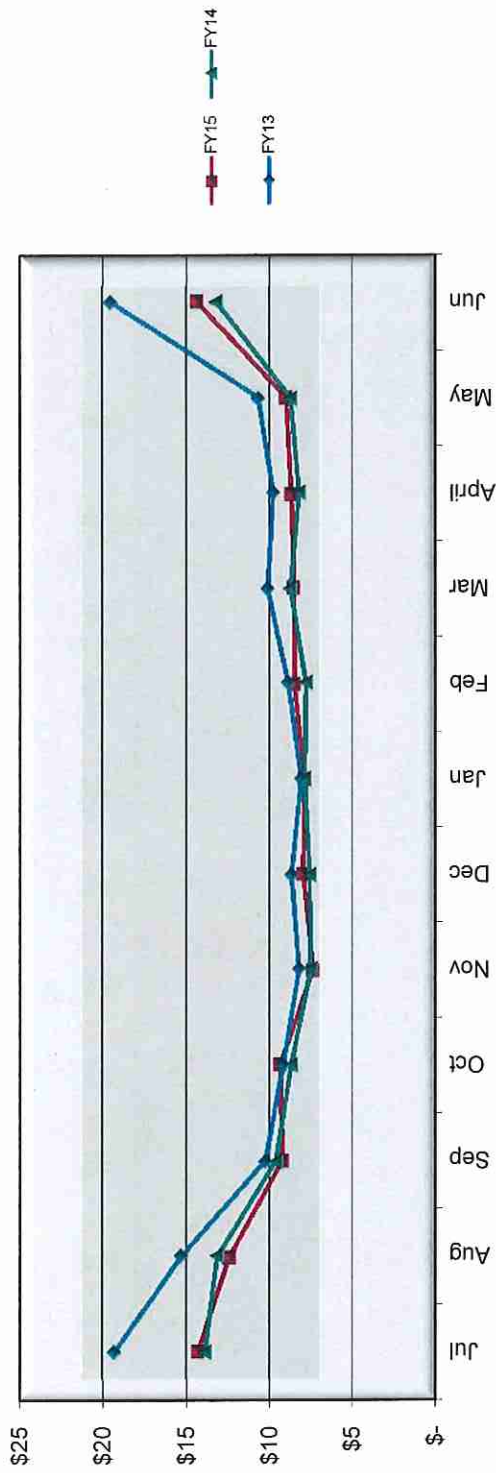
Retrospective IBNR In Terms of Incurred CIGNA Dental Claims in Last Three Months



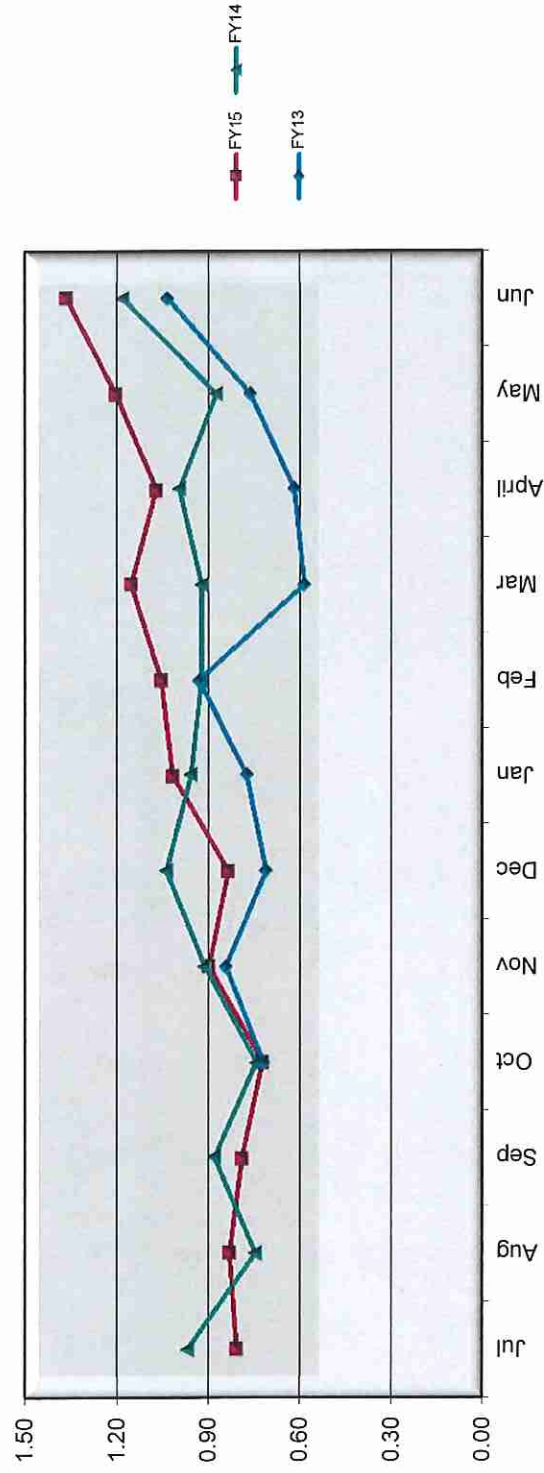
Data reflects the most recent 36 months.



Per-Employee-Per-Month Avesis and EyeMed Vision Claims

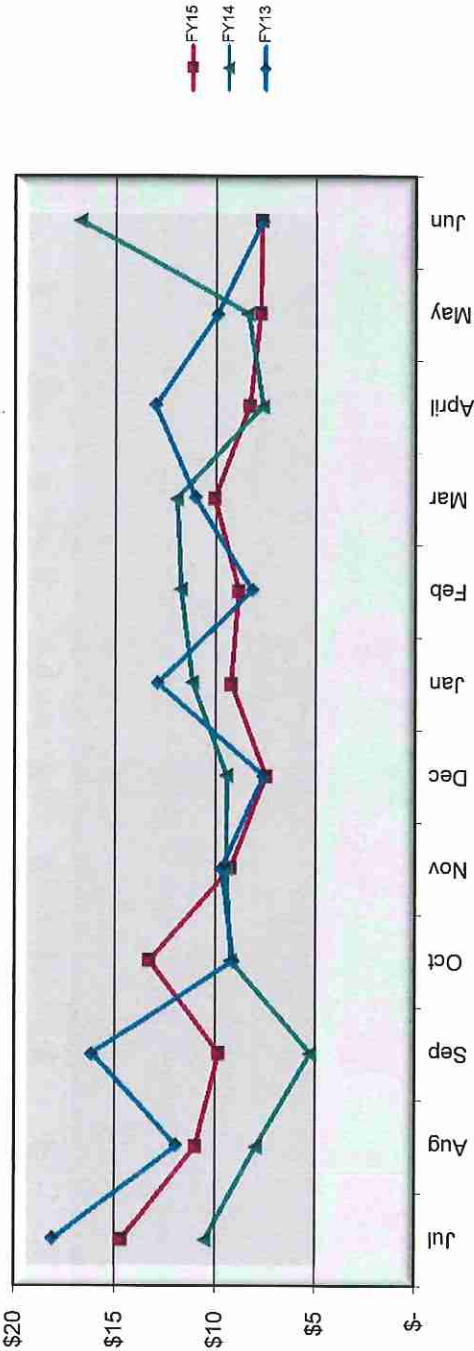


Retrospective IBNR In Terms of Incurred Avesis and EyeMed Vision Claims in Last Three Months

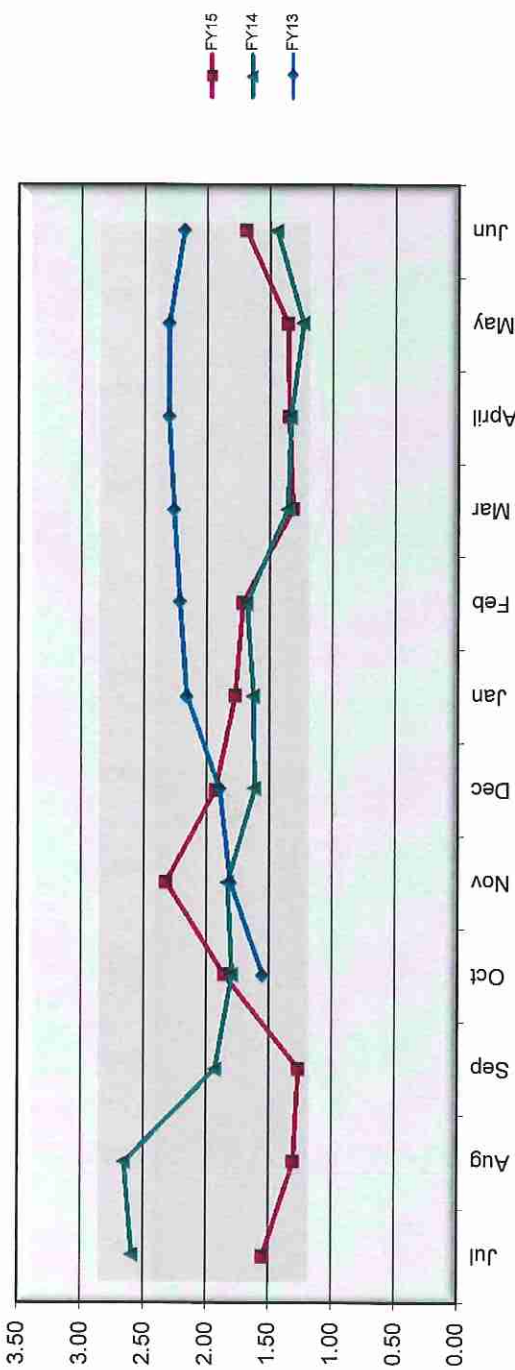


Data reflects the most recent 36 months.  
Source data from EyeMed for claims incurred through June 30, 2013 and from Avesis for claims incurred beginning July 1, 2013.

Per-Employee-Per-Month Magellan Behavioral Health Claims



Retrospective IBNR In Terms of Incurred Magellan Behavioral Health Claims in Last Three Months



Data reflects the most recent 36 months.

## APPENDIX B

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### IBNR/RBUC Estimates

IBNR/RBUC Estimates <sup>1</sup>

Claims Incurred But Not Paid as of 6/30/2015			
Plan	Actual Claims Paid 7/1/2015 through 7/31/2015	Still Outstanding as of 7/31/2015	6/30/2015 IBNR with Runout through 7/31/2015
CIGNA CMG	\$2,169,916	\$1,155,063	\$3,324,979
CIGNA OAP	\$6,977	(\$77,853)	(\$70,876)
CIGNA HSA	(\$7,649)	(\$9,786)	(\$17,435)
<i>CIGNA Medical Subtotal</i>	<i>\$2,169,244</i>	<i>\$1,067,424</i>	<i>\$3,236,668</i>
UHC PPO	\$2,969,731	\$2,702,174	\$5,671,905
UHC HDHP	\$2,132,099	\$1,223,966	\$3,356,065
<i>UHC Medical Subtotal</i>	<i>\$5,101,830</i>	<i>\$3,926,140</i>	<i>\$9,027,970</i>
<b>Medical Total</b>	<b>\$7,271,074</b>	<b>\$4,993,564</b>	<b>\$12,264,638</b>

Claims Incurred But Not Paid as of 6/30/2015			
Plan	Actual Claims Paid 7/1/2015 through 7/31/2015	Still Outstanding as of 7/31/2015	6/30/2015 IBNR with Runout through 7/31/2015
Catamaran Rx	\$6,768	\$2,635	\$9,403
CIGNA Dental	\$199,797	\$454,205	\$654,002
Avesis Vision	\$138,702	\$29,115	\$167,817
<b>Magellan Behavioral Health</b>	<b>\$47,946</b>	<b>\$80,351</b>	<b>\$128,297</b>
Sedgwick Short Term Disability Plans 40%	\$11,222	\$13,711	\$24,933
Sedgwick Short Term Disability Plans 50%	\$17,243	\$31,355	\$48,598
Sedgwick Short Term Disability Plans 60%	\$145,286	\$245,125	\$390,411
<i>Sedgwick Short Term Disability Subtotal</i>	<i>\$173,751</i>	<i>\$290,191</i>	<i>\$463,942</i>
<b>Total</b>	<b>\$7,838,038</b>	<b>\$5,850,061</b>	<b>\$13,688,099</b>

1 - Excludes due and unpaid for benefits other than STD. For STD, includes the reserve for the present value of amounts not yet due.



## APPENDIX C

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### Development of Reserve for Self-Insurance

**Development of Reserve for Self-Insurance**  
Based on Risk Based Capital Requirements for Health Insurers

	A	B	C	D	E	F	G	H	I
	Active Employees plus COBRA plus Pre-Medicare Retirees								
	Medical	Pharmacy Drug	Behavioral Health	Medical + Pharmacy + Behavioral Health	Dental	Vision	Dental + Vision	Subtotal Medical, Behav Health, Dental, Vision	Short-Term Disability Income
1. Paid Claims for 12 months ending June 2015	\$ 106,199,507	\$ 19,255,106	\$ 1,132,724	\$ 126,587,336	\$ 4,150,755	\$ 1,312,594	\$ 5,463,349	\$ 132,050,685	\$ 2,384,193
2. Incurred Claims for 12 months ending June 2015	\$ 108,650,129	\$ 19,299,343	\$ 1,111,218	\$ 129,020,690	\$ 4,215,589	\$ 1,346,993	\$ 5,562,582	\$ 134,583,271	\$ 2,308,323
3. Annual Claims = Greater of Paid or Incurred				\$ 129,020,690			\$ 5,562,582	\$ 134,583,271	\$ 2,384,193
4. First Tier				\$ 3,000,000			\$ 3,000,000	\$ -	\$ -
5. Remainder after First Tier				\$ 126,020,690			\$ 2,562,582	\$ -	\$ -
6. Second Tier				\$ 22,000,000			\$ 2,562,582	\$ -	\$ -
7. Remainder				\$ 104,020,690			\$ -	\$ -	\$ -
8. First Tier				\$ 450,000			\$ 360,000	\$ 810,000	\$ 119,210
9. Second Tier				\$ 3,300,000			\$ 194,756	\$ 3,494,756	\$ -
10. Remainder				\$ 9,361,862			\$ -	\$ 9,361,862	\$ -
11. Total				\$ 13,111,862			\$ 554,756	\$ 13,666,618	\$ 119,210
12. Managed Care Discount for Payments made According to Contractual Arrangements				0.150					
13. Portion of Payments based on Contractual Arrangements				90%					
14. Managed Care Discount Calculated				\$ 1,770,101			\$ 1,770,101	\$ 1,770,101	
15. RBC After Managed Care Discount				\$ 11,341,761			\$ 554,756	\$ 11,896,517	\$ 119,210
16. Alternate Risk Charge				\$ 1,500,000			\$ 50,000		
17. Net Underwriting Risk RBC				\$ 11,341,760			\$ 554,756	\$ 11,896,516	\$ 119,210
18. As % of Annual Claims				8.8%	1.1 months of claims		10.0%	8.8%	5.0%
19. 150% of Net Risk Underwriting RBC				\$ 17,012,640			\$ 832,134	\$ 17,844,774	\$ 178,814
20. As % of Annual Claims				13.2%	1.6 months of claims		15.0%	13.3%	7.5%
21. 250% of Net Risk Underwriting RBC				\$ 28,354,400			\$ 1,386,890	\$ 29,741,290	\$ 298,024
22. As % of Annual Claims				22.0%	2.6 months of claims		24.9%	22.1%	12.5%
23. 100% level as % of Annual Paid Claims				9.0%			10.2%	9.0%	5.0%
24. 150% level as % of Annual Paid Claims				13.4%			15.2%	13.5%	7.5%
25. 250% level as % of Annual Paid Claims				22.4%			25.4%	22.5%	12.5%
Tiered RBC Factors									
	Comprehensive Major Medical			Dental and Vision			Short-Term Disability Income		
\$0 through \$3 million	0.150			0.120			0.050		
\$3 through \$25 million	0.150			0.076			0.050		
\$25 million and over	0.090			0.076			0.050		

## APPENDIX D

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### Five Year Historical Data

## Five Year Historical Data

Coverage	Liabilities and Reserves as of June 30, 2015	Liabilities and Reserves as of June 30, 2014 from Apr 14, 2015 Revision	Liabilities and Reserves as of June 30, 2014 from Oct 17, 2014 Report	Liabilities and Reserves as of June 30, 2013	Liabilities and Reserves as of June 30, 2012	Liabilities and Reserves as of June 30, 2011
1 Liability for medical claims	\$ 12,264,638	\$ 10,234,621	\$ 10,234,621	\$ 6,995,779	\$ 9,788,420	\$ 10,991,704
2 Liability for prescription drug claims	\$ 9,403	\$ -	\$ -	\$ -	\$ -	\$ -
3 Liability for dental claims	\$ 654,002	\$ 553,998	\$ 553,998	\$ 466,041	\$ 484,345	\$ 409,517
4 Liability for vision claims	\$ 167,817	\$ 143,530	\$ 143,530	\$ 161,597	\$ 107,576	\$ 91,554
5 Liability for behavioral health claims	\$ 128,297	\$ 226,157	\$ 226,157	\$ 293,591	\$ 231,766	\$ 178,642
6 Liability and reserve for short-term disability benefits	\$ 463,942	\$ 528,991	\$ 528,991	\$ 369,938	\$ 323,861	\$ 443,654
7 Subtotal for 1+2+3+4+5+6	\$ 13,688,099	\$ 11,687,297	\$ 11,687,297	\$ 8,286,946	\$ 10,935,967	\$ 12,115,071
8 Liability for unpaid claims adjustment administrative expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 175,000
9 Reserve for large claims	\$ 2,502,661	\$ 2,132,448	\$ 4,781,520	\$ 3,296,724	\$ 3,273,892	\$ 2,722,850
10 Reserve for excess COBRA expense beyond the premiums for those enrolled in COBRA as on July 1.	\$ 234,891	\$ 195,703	\$ 195,703	\$ 245,625	\$ 205,841	\$ 244,089
11 Reserve for claims fluctuation based on claims incurred in fiscal year ending June 30.	\$ 12,194,540	\$ 11,688,584	\$ 17,365,711	\$ 15,393,768	\$ 25,647,270	\$ 24,843,470
12 Premium Deficiency Reserves	\$ 839,748	\$ 7,714,984	\$ 7,714,984	\$ 1,000,000	\$ -	\$ -
13A. Liability for earned but unpaid performance incentives	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13B. Reserve for maximum potential performance incentives	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000
14 Total for 7+8+9+10+11+12+13A+13B	\$ 29,459,939	\$ 33,419,016	\$ 41,745,215	\$ 28,223,063	\$ 40,062,970	\$ 40,120,480





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